

USDA Forest Service Aviation Safety Summary September/October 2001



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Information Sharing

From Region 4, Terry Cullen and Jim Morrison

Enforcement Guidance for Operations
contrary to NOTAMs issued as a result
of the events of September 11, 2001

Assistant Chief Counsel for Enforcement, AGC-300
Director, Flight Standards Service, AFS-1

Regional Counsel
Regional Flight Standards Division Managers

Following the events of September 11, 2001, the Administrator issued Flight Data Center (FDC) Notices to Airmen (NOTAMs) under 14 CFR sections 91.137 and 91.139. Such NOTAMs place significant restrictions or prohibitions on several types of aircraft operations. This document states how the FAA, in applying its sanction guidance policy, intends to enforce against airmen who operate any aircraft contrary to any Notice to Airmen issued on, or after, September 11, 2001 as a result of the events of September 11 (referred to in this document as "a September 11 NOTAM" or "September 11 NOTAMs").

The FAA's policies for enforcing Title 49, United States Code, subtitle VII ("FAA's statute") and the FAA's regulations primarily are stated in FAA Order 2150.3A, *Compliance and Enforcement Program*. Within that order is guidance for the agency's exercise of discretion in choosing the type of enforcement action to be taken and determining the appropriate sanction for a violation of the FAA's statute or the FAA's regulations. In selecting a sanction, the FAA considers a number of factors, including the degree of hazard to the safety of other aircraft or persons or property in the aircraft or on the ground, and whether the violation was inadvertent or deliberate. When an airman's conduct demonstrates that he or she lacks either the technical proficiency or the degree of care, judgment, and responsibility required for the certificate or ratings held, the FAA revokes the certificate and/or ratings.

While the FAA has the discretion to address an apparent violation administratively with a warning notice or letter of correction, we have determined that violation of the September 11 NOTAMs would not meet the criteria for taking administrative action. Those criteria, stated in paragraph 205 of Order 2150.3A, provide that an apparent violation must not reflect a substantial disregard for safety or security. Given the extraordinary events of September 11, 2001 and the heightened state of security that precipitated the September 11 NOTAMs, an airman who operates an aircraft contrary to such NOTAMs would demonstrate a substantial disregard for safety and security, regardless of the type of certificate he or she held. Accordingly, we expect legal

enforcement action to be taken for any violations resulting from, or relating to, an operation contrary to the September 11 NOTAMs. In accordance with Order 2150.3A, Flight Standards will investigate and prepare an enforcement investigative report (EIR) for each apparent violation of the September 11 NOTAMs.

I. When to Close a Case with "No Action"

We recognize that confusion may exist concerning certain provisions of some of the September 11 NOTAMs. For each EIR, therefore, the reporting inspector will consult with the Regional Counsel's office to determine whether applicable language of the NOTAM in effect at the time of the apparent violation is ambiguous or confusing. If it is determined that an airman could legitimately misunderstand a NOTAM requirement and that the misunderstanding led to the violation of a September 11 NOTAM, the FAA will close the EIR without taking enforcement action.

II. When to Seek a Suspension

Where the applicable language of a September 11 NOTAM is understandable or an airman's purported confusion is unreasonable, the FAA will take appropriate legal enforcement action against an airman for any violation resulting from, or relating to, his or her operation of an aircraft contrary to a September 11 NOTAM. When the violation does not appear to be deliberate, a certificate suspension will be initiated. In determining an appropriate sanction, the FAA will apply the policy in Appendix 4 of Order 2150.3A. While the Sanction Guidance Table of Appendix 4 does not provide specific guidance for operations contrary to a NOTAM, it provides analogous guidance for a certificate suspension in the range of 30 to 90 days for a single, inadvertent, first-time operation within a restricted or prohibited area. However, these NOTAM violations are aggravated in view of the extraordinary events, need for heightened security, and continuing emergency situation that gave rise to the September 11 NOTAMs. Moreover, the degree of hazard of a violation resulting from, or relating to, an operation contrary to a September 11 NOTAM would be significantly greater than that normally inherent in a violation of that kind. Indeed, in some cases of NOTAM violations, military aircraft have been required to force aircraft to land. Accordingly, under current agency policy, we expect your offices to propose a certificate suspension in the range of 150 to 240 days for a single, inadvertent, first-time violation resulting from, or related to, an aircraft operation contrary to a September 11 NOTAM. An inadvertent violation is one that is not the result of purposeful conduct. To determine an appropriate length of suspension within or outside this range, other factors described in Appendix 4 of Order 2150.3A, such as the attitude of the violator, the nature of the violation, and any prior violation history of the alleged violator must be considered.

III. When to Seek a Revocation

With regard to deliberate operations contrary to a September 11 NOTAM, we expect your offices to take remedial legal enforcement action. Especially given the circumstances under which these NOTAMs were issued, such a violation reflects disdain

From WO East, Ed Stone

File Code: 5700

Date: September 5, 2001

Subject: Airtanker Rotation

To: Regional Foresters, Station Directors, Area Director, and IITF Director

Several airtanker contractors have informally complained about their treatment of rotation for dispatch to fire incidents and the lack of a national standardized policy. Others felt that they might have been discriminated against based on the performance capabilities of their aircraft. Specifically cited was the policy of holding an airtanker throughout the day for initial attack while the remaining aircraft were assigned to going fires, and assigning an airtanker or group of airtankers to standby for an incident while other airtankers flew on their assigned incidents.

This method of dispatching airtankers, while effective for the dispatch system, does not appear to meet the definition of fair and equitable use of federal contractors as demonstrated in several recent federal court cases (see enclosure). Fair and equitable use of federally contracted items is defined as when like contractors can perform the same job (i.e. dropping fire retardant), then each contractor shall have a fair and equal opportunity for use by the Government without discrimination based on type of equipment or personnel.

Additionally, it was reported that some cooperators are managing the Forest Service contracted resources (airtanker and helicopters) outside of the parameters allowed under their contract. Federally contracted aviation resources, when assigned to other agencies or state cooperators' incidents, remain under the direction of the Federal Contracting Officer, are bound only by their contract with the Forest Service, and hence, will be treated fairly and equitably during their assignment with another federal agency or state entity.

Therefore, regardless of the federal or state lands where the fire incident is occurring, airtankers contracted under the Forest Service's National Large Airtanker Services Contract will be used fairly, without discrimination per the enclosed rotation policy. This policy sheet will be posted at airtanker bases, incorporated into Forest Aviation Plans and the Forest Service Handbook 5709.16.

A question and answer sheet is also enclosed which deals with the most common questions on this issue. If you have questions on this policy not answered in the Q & A sheet, contact Charlotte Larson, National Fixed Wing Specialist at (208) 387-5625 for airtanker operation issues and Rich Denker, National Airtanker Contracting Officer at (208) 387-5610 for contracting issues.

/s/ Michael T. Rains

MICHAEL T. RAINS
Deputy Chief
State and Private Forestry

Enclosures

FEDERALLY CONTRACTED TYPE I / II AIRTANKER ROTATION POLICY

- 1. Airtankers contractually assigned to the bid item (Designated Base) shall be first out each day, including those returning from day(s) off. Thereafter all airtankers shall be dispatched in rotation, regardless of the location of the incident, except when:**
 - a. The next airtanker in rotation has an operating restriction at the new base it is being reassigned to.**
 - b. A demonstrated benefit to the agency and the contractor would be realized by changing the rotation. Acceptable reasons for changing the rotation are:**
 - i. Returning the contractor to their bid item (Designated Base) for a new incident.**
 - ii. Returning the contractor to their bid item (Designated Base).**
 - iii. Repositioning the contractor to a base where their maintenance crews or supplies are available.**
- 2. Transient airtankers coming on after day(s) off shall begin at the end of the rotation line.**
- 3. Additional contracted airtankers, brought on for the purpose of supplementing the primary contract airtankers, shall begin rotation after the primary contracted airtanker(s) at the beginning of each day.**
- 4. MAFFS and Canadian airtankers brought on for the purpose of supplementing the commercial airtanker fleet shall begin rotation after the contracted airtanker(s) at the beginning of each day.**

Common Questions and Answers about this Rotation

Q. Why are we changing the way geographic areas manage airtankers?

- A. While Geographic Area Coordination Center's operations remain autonomous there must be uniform policies for the use and contract administration in regard to national resources.

Q. Some dispatch offices assign an "A" number to the airtanker's "Tail Number" and assign it exclusively to a single incident. Can we continue to dispatch this way?

- A. Yes, except for the exclusive assignment part of the process. The dispatcher will need to assign the individual "tail number" to other incidents (if it is rotated to them by the base manager) and assign an "A" number on that incident's Resource Order.

Q. So what this policy is saying is an airtanker may come in from one incident and be sent to another incident, then back to the initial incident or even a different one? Wouldn't that be confusing to the dispatch system?

- A. No, many Geographic Areas local dispatchers have operated this way with great success for many years. The key to success is having an IC or ATGS who places their request for retardant **by the number of loads they expect to use** and suggests the number of airtankers it will take to accomplish their objective. The airtanker base manager coordinates and tracks where each load is delivered and completes the national standard reporting document at the end of the day for every incident.

Q. Wouldn't the assignment of multiple incidents to each airtanker limit the ATGS or IC?

- A. That has not been the case in Geographic Areas that dispatch by this policy. When there is proper coordination between the airtanker base manager and the ATGS (or through the dispatcher if communication cannot be established directly), the base can plan to launch the airtankers with proper spacing so as one departs another arrives at the incident(s).

Q. Some ATGSs want lots of airtankers orbiting the fire so they can drop them one right after the other.

- A. There are several problems related to this tactic. The Forest Service does not want multiple airtankers orbiting an incident waiting to drop because:
1. There is an increased risk of a mid-air collision
 2. At \$40 to \$50. per minute for airtanker flight time orbiting is not cost effective
 3. The Leadplane or ATSM pilot can only drop one airtanker at a time
 4. Orbiting multiple airtankers is not good utilization of a national resource when it can be used on a neighboring incident
 5. Orbiting multiple airtankers elevates the workload (and stress) for all aerial resources over an incident

Airtanker Base Managers and Incident Dispatchers can plan for airtanker departure and arrival times at an incident based on the airtanker's speed and distance to travel (common flight planning is 3 to 4 nm per minute depending on type of airtanker) to ensure that they do not "back up" over an incident. It is up the ATGS or Leadplane to notify the airtanker base if on scene operations are slowing or accelerating so the base can respond appropriately.

Q. Wouldn't the airtanker pilot get confused going to a different incident?

- A. No, airtanker pilots have said going to multiple incidents breaks up the monotony and keeps their piloting and dropping skills sharper.

Q. If a single or multiple airtankers can no longer be held for initial attack where do we get an airtanker for a new incident?

- A. The fastest place to get an airtanker to respond to a new incident is by diverting one that is already airborne. On extremely high potential days you can also arrange with the airtanker base manager to keep the last airtanker ready for dispatch on the ground until another one lands so there is one airtanker always on the ground (but is still in rotation and being sent to an incident as the other touches down). This method is not as efficient as the diverting method and requires one extra airtanker to deliver the required amount of loads to the incident(s).

Q. Wouldn't this mandatory rotation use more airtankers and over flow our airtanker base?

A. Under the NATSII Study airtankers are demonstrated to be most efficient when utilized from multiple bases to service one incident. Geographic, Zone or Forest boundaries should not be considered when using this National Resource. Dispatching from multiple bases, even ones up to 60 NM farther from the next closest base, is more efficient than placing all the airtankers at one base for a large fire incident and gives the dispatcher greater flexibility for diverting airtankers for new incidents.

Q. Can I just order all Type I airtankers to get the fastest and largest?

A. No. Under the National Large Airtanker Services Contract there is no differentiation between Type I and Type II airtankers. Large contract airtankers are rotated fairly under this policy at the airtanker base regardless if they Type II or I. Type III (such as the CDF S-2) and IV (SEATS) are not awarded under this contract and are not considered in the equitable use provision of this policy. The Type IV contracted SEATS however should be used equitably with other SEATS with the same provisions of a parallel policy. The Type III S-2 airtankers are State of California resources.

Q. What about when a Forest Service contract airtanker operates out of a State or another Federal agency's airtanker base, do they have to follow this policy?

A. Yes. As the large airtanker contractor is under our national contract we must ensure that they are treated fairly and have an equal opportunity for work regardless of the base we have assigned them to operate from. When we assign a federally contracted airtanker to another agency or state, the contractor still must abide by the Forest Service Large Airtanker Services Contract and we must continue administrating it in a fair and even way. Remember, the contractor is only bound by the conditions of the contract and operates on our behalf when assigned to other agencies or state incidents.

Q. What is the court case mentioned in the letter?

A. There have been many court cases over the years describing the failures by the government and contractors alike to act "fairly." The point of all these cases is that every contract carries with it the requirement that both sides, the government and contractor, act "fairly." There is also a corollary that the Government must treat all contractors fairly, and cannot favor one over the other.

More from Ed Stone

If you haven't been to the Airspace page recently, you need to check out the excellent work on TFR's. <http://www.fs.fed.us/r6/fire/aviation/airspace/>

It's amazing what you find out there sometimes! A link from the US NOTAM Office (well, it's really military) page to a FS website.

More from Ed Stone

Many of you have asked: "Is there money for aircraft?" "Where's the \$20mm?" "Is there \$20mm?"

The 10 year strategy contained \$20mm a year beginning in '03. <Given the information in the first 3 items, above, this would be a poor time to start holding our collective breaths!> There is currently \$20mm in the project proposals for aircraft in '02 (but that looks unlikely and is on hold for further discussion). Part of an underlying problem is the seeming complete uniqueness of the National Shared Resource (NSR) concept to Fire and Aviation

Management. A purchase of a NSR asset by FAM appears as a WO expenditure, but what unit is really the beneficiary of that purchase? We have become a hostage to our own tactic of buying with Off the Top Dollars to avoid the rakeoff of indirect costs at successively lower levels if the funds are shipped out. In the agency's zeal to "get money to the field" the field (RF's on down have lost track that they are: 1) the primary beneficiary of NSR; 2) in position to receive much more of the NSR (for much less involvement) than if the funds had been pushed-out and expended locally. There is some critically needed "selling" of NSR benefits you could be doing to push this understanding up the chain. In your shoes, would I put huge effort into recruiting to staff an ASM program in 2002? No. However, with each passing month the date where ASM is going to be a reality gets closer.

What should Aviation be doing (relative to leadplane replacement)?

A) Keep making progress toward ability to implement the ASM concept.

1) Move from draft guide to final.

2) Get HAT suite nailed down (then just monitor new technology so that when implementation funds arrive we can get current stuff that does what we want for us and our customers).

3) Keep cost estimates updated and be ready to start moving in to next generation aircraft and mission profile - it will happen only the when is in question.

B) Continue running a safe leadplane program

1) Recruit, and train to full complement (lack of leadplane pilots is currently limiting our ability to add more tankers to achieve NATS II recommended gallon capacity with smaller aircraft than NATS II envisioned). The first sale under the Wildfire Suppression Aircraft Transfer Act is in progress. Until NATS II recommended gallonage is met we may not have to eliminate older tankers.

2) Monitor and communicate the flight hour accumulation of the Baron fleet. There fuse runs out sometime which is going to force the issue. Whether the decision is buy or lease at that point remains a question for the future.

3) Keep your Directors informed and engaged.

C) Keep making sure everyone gets home at night or at the end of the incident!



Thanks everyone for sharing information, it is greatly appreciated.

If you have something you would like to share via this publication, please send to bhall@fs.fed.us

Aviation Safety Continuing Education Information

Embry Riddle Continuing Education Aviation Safety Certificate Program. For more information on the internet click on the following link.

<http://www.ec.erau.edu/dce/pro-programs/safety.html>

2002 Aviation Safety Certificate Program Course Schedule

Daytona Beach, FL

29 April - 2 May **AAIM**
3 May - 7 May **HPA** (No class 5 May)
8 May - 11 May **ASPM**

Prescott, AZ

10 June - 13 June **AAIM**
14 June - 18 June **HPA** (No class 16 June)
19 June - 22 June **ASPM**
24 June - 27 June **AAAI**

Prescott, AZ

5 Aug - 8 Aug **AAIM**
9 Aug - 13 Aug **HPA** (No class 11 Aug)
14 Aug - 17 Aug **ASPM**
19 Aug - 22 Aug **AAAI**

Prescott, AZ

7 Oct - 10 Oct **AAIM**
11 Oct - 15 Oct **HPA** (No class 13 Oct)
16 Oct - 19 Oct **ASPM**

AAIM = Aircraft Accident Investigation & Management

HPA = Human Performance in Aviation

ASPM = Aviation Safety Program Management

AAAI = Advanced Aircraft Accident Investigation

Southern California Safety Institute schedule. For more information click on the following link: <http://www.scsi-inc.com/2002-schedule.html>

Southern California Safety Institute	2002 Course Schedule											
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Note: Any SCSi course may be taken individually or as part of a series.

Aircraft Accident Investigation Certificate Required Courses	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Aircraft Accident Investigation (AAI) \$2,775 + tax		18 - 2 A				3 - 15 A		19 - 31 A				
Human Factors for Accident Investigators (HFAI) \$1,575 + tax			4 - 8 A			17 - 21 A			3 - 7 A			
Investigation Management (IM) \$1,775 + tax			11 - 15 A			24 - 28 A			9 - 13 A			

Accident Investigation Electives	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Gas Turbine Accident Investigation (GTAI) \$1,775 + tax			18 - 22 A						16 - 20 A			
Helicopter Accident Investigation (HAI) \$1,775 + tax			25 - 29 A									
Advanced Aircraft Accident Investigation (AAAI) \$2,250										1 - 5 T		
Aircraft Accident Litigation for Managers and Investigators (AAL) \$1,775			18 - 22 T									
Incident Investigation											4 - 8 C	

and Analysis (IIA) \$1,575												
Aircraft Performance & Structures Investigation (APSI) \$1,575						8 - 12 T						
Electronic Systems Investigation (ESI) \$1,575						15 - 19 T						
Non-Aircraft Accident Investigation (NAI) \$1,575						22 - 26 C						
Air Traffic Control Investigation (ATCI) \$1,375				15 - 17 T								
Fire & Explosion Investigation (FEI) \$1,575				20 - 24 T								
Aircraft Accident Investigation for Media Professionals (AAIMP) \$1,100 + tax												

Aviation Safety Management Certificate	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Required Courses												
Aircraft Accident Investigation (AAI) \$2,775 + tax		18 - 2 A				3 - 15 A		19 - 31 A				
Aviation Safety Management (ASM) \$2,575				22 - 03 C					30 - 11 C			
Human Factors in Aviation Safety Management (HFASM) \$1,575					6 - 10 C					14 - 18 C		
Operational Risk Management (ORM) \$1,575					13 - 17 C					21 - 25 C		

Safety Management Electives	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Ramp and Maintenance Safety (RMS) \$1,575					20-24 C					28 - 01 C		
Safety Decision Making (SDM) \$1,575										4-8 T		
Practical Systems Safety (PSS) \$1,575										11 - 15 C		
Incident Investigation and Analysis (IIA) \$1,575										4 - 8 C		
Non-Aircraft Accident Investigation (NAI) \$1,575							22 - 26 C					

Cabin Safety Courses	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
International Cabin Safety Training (ICST) \$1,795									24 - 27 P			
Cabin Accident Investigation (CAI) \$1,575			2-3 S 7-9 S									
International Cabin Safety Symposium (CSS)			4-7 S									

Key:

A = Albuquerque, New Mexico

C = Colorado Springs, Colorado

P = Panama City, Florida

T = Torrance, California

S = Southern California (Universal City)

Note: AAI is required for both the AAI and ASM Certificate Program

Note: All courses offered in New Mexico are subject to a gross receipts tax of 5.8125 Percent

Helicopter Association International training opportunities. For more information call HAI's Operations Department at (703)683-4646 or click on the following link:
<http://www.rotor.com/Education/index.htm>

UPCOMING EVENTS

September 17, 2001	HAI Technical Committee Meeting, New Orleans, LA (703) 683-4646	
September 18-20, 2001	NBAA Convention, New Orleans, LA Ph (202) 783-9000	
September 24-26, 2001	AAMS Air Medical Transport Conference, Orlando, FL (703) 836-8732	
November 7-10, 2001	AOPA Expo 2001, Fort Lauderdale, FL (888) 462-3976	
February 14-16, 2002	Heli Expo 2002, Orlando, FL (703) 683-4646	
February 8-19, 2002	HAI Professional Educational Series, Heli-Expo 2002 Orlando, FL	
	Helicopter Maintenance Management Course *	Feb 10-13, 2002
	Human Performance in Helicopter Maintenance Part I *	Feb 12-13, 2002
	Human Performance in Helicopter Maintenance Part II *	Feb 17-18, 2002
	Regulatory Compliance: Airworthiness and Maintenance Issues *	Feb 13, 2002
	Non-Destructive Testing Course *	Feb 12-13, 2002
	Manufacturer's Technical Briefings*	Feb 14-15, 2002
	Maintenance Director's Forums*	Feb 15-16, 2002
<i>* Indicates course/seminar approved for IA Renewal.</i>		

University of Southern California Aviation Safety Program Course Schedule. For more information click on the following link:

<http://www.usc.edu/dept/engineering/AVSched>

**Aviation Safety Program
Management**

September 10-21, 2001
January 17-27, 2002
March 18-28, 2002
June 3-13, 2002

**Aircraft Accident
Investigation**

September 24 - October 5, 2001
December 10-21, 2001
March 4-15, 2002
June 17-28, 2002
September 16-27, 2002
December 2-13, 2002

**Helicopter Accident
Investigation**

October 22-26, 2001
April 15-19, 2002
October 21-25, 2002

**Gas Turbine Engine
Accident Investigation**

November 12-16, 2001
May 13-17, 2002
November 4-8, 2002

**Human Factors in
Aviation Safety**

October 15-19, 2001
December 3-7, 2001
Feb 25 - Mar 1, 2002
May 20-24, 2002
September 9-13, 2002
November 18-22, 2002

**Safety Management For
Aviation Maintenance**

October 29 - November 2, 2001
April 8-12, 2002
November 11-15, 2002

**Accident/Incident
Response Preparedness**

November 7-9, 2001
April 4-5, 2002

October 17-18, 2002

**Developing A Crew
Resource Management
Program**

September 5-7, 2001

May 6-8, 2002

October 28-30, 2002

**Legal Aspects of Aviation
Safety**

October 9-10, 2001

January 22-23, 2002

August 26-27, 2002

**The Role of the Technical
Witness In Litigation**

October 11-12, 2001

January 24-25, 2002

August 28-29, 2002

**Photography for Aircraft
Accident Investigation**

November 5-6, 2001

April 1-3, 2002

October 14-16, 2002

System Safety

October 29 - November 9,
2001

February 4-15, 2002

October 28 - November 8,
2002

Software Safety

November 12-15, 2001

February 19-22, 2002

November 11-14, 2002

**Incident Investigation and
Analysis**

November 26-30, 2001

April 22-26, 2002

August 19-23, 2002

Department of Transportation, TSI Course Schedule. For more information click on the following link:

<https://www.tsi.dot.gov/sro/index.cfm?page=Sched.cfm&empcode=GUEST7627&SSMinus=True>

Class ID	Course Code	Course Name	Date/Time	Location
5377	00056	Instrument Approach Procedures Automation (IAPA)	10/15/2001 08:00 AM 10/23/2001 04:00 PM	Transportation Safety Institute
5392	00050	Introduction To Flight Procedures (TERPs) (AVN)	10/15/2001 08:00 AM 11/02/2001 04:00 PM	Transportation Safety Institute
5298	00035	Aircraft Accident Investigation	11/01/2001 08:00 AM 11/09/2001 04:00 PM	Transportation Safety Institute
5393	00050	Introduction To Flight Procedures (TERPs) (AVN)	11/26/2001 08:00 AM 12/14/2001 04:00 PM	Transportation Safety Institute
5317	00008	Human Factors in Aircraft Accident Investigation	11/27/2001 08:00 AM 11/30/2001 04:00 PM	Transportation Safety Institute
5318	00008	Human Factors in Aircraft Accident Investigation	11/27/2001 08:00 AM 11/30/2001 04:00 PM	Transportation Safety Institute
5340	00007	Rotorcraft Safety and Accident Investigation	11/27/2001 08:00 AM 12/06/2001 04:00 PM	Fort Worth, TX
5378	00056	Instrument Approach Procedures Automation (IAPA)	12/03/2001 08:00 AM 12/14/2001 04:00 PM	Transportation Safety Institute
5330	00003	Aircraft Accident Investigation, Recurrent Training	12/04/2001 08:00 AM 12/07/2001 04:00 PM	Transportation Safety Institute
5335	00003	Aircraft Accident Investigation, Recurrent Training	12/04/2001 08:00 AM 12/07/2001 04:00 PM	Transportation Safety Institute
5348	00038	Aviation Safety Officer	12/11/2001 08:00 AM 12/13/2001 04:00 PM	Transportation Safety Institute
5352	00027	Turbine Engine, Aircraft Accident Investigation	12/11/2001 08:00 AM 12/14/2001 04:00 PM	Transportation Safety Institute
5341	00007	Rotorcraft Safety and Accident Investigation	01/08/2002 08:00 AM 01/17/2002 04:00 PM	Fort Worth, TX
5346	00379	Aircraft Cabin Safety Investigation	01/08/2002 08:00 AM 01/09/2002 04:00 PM	Transportation Safety Institute
5299	00035	Aircraft Accident Investigation	01/10/2002 08:00 AM 01/18/2002 04:00 PM	Transportation Safety Institute
5380	00056	Instrument Approach Procedures Automation (IAPA)	01/22/2002 08:00 AM 01/30/2002 04:00 PM	Transportation Safety Institute
5394	00050	Introduction To Flight Procedures (TERPs) (AVN)	01/23/2002 08:00 AM 02/12/2002 04:00 PM	Transportation Safety Institute
5319	00008	Human Factors in Aircraft Accident Investigation	01/29/2002 08:00 AM 02/01/2002 04:00 PM	Transportation Safety Institute

Mishap Update

In August and September we experienced numerous mishaps. We had two accidents and four incidents with potential (IWP).

August was very busy, on the 16th a M-18 Dromader, SEAT, experienced an accident while landing near Ukiah, OR. The aircraft sustained significant and substantial damage including: bent propeller; left wing spars broken; right wing damaged at the wing tip and wing bottom, damage to the flaps ailerons, and wing bottom mount appears to be broken; tail section is broken, tail wheel and strut broken off the fuselage; rudder and mounts broken; rudder bent; right hand horizontal stabilizer support strut broken and twisted; right hand elevator metal tears; left strut bent; right strut is bent 90 degrees at the bottom of the oleo; and many push pull tubes and cables had apparently been broken. Fortunately the pilot sustained only minor injuries.

On August 19th a Aero Commander flying air attack on the Red Mountain fire, Kootenai NF experienced an IWP when it experienced a loss of power in both engines. The pilot began emergency procedures and was able to regain power. The aircraft immediately started back to the Libby airport where he made a safe landing. The engines shut down again as he was just entering the taxiway.

On August 25th a Bell 214 performing bucket drops on the Star Fire, Eldorado NF experienced an IWP when the bucket had gone up and over the right side of the tail boom and came to rest on top of the left horizontal stabilizer. The bucket never touched the main or tail rotors. The pilots were able to locate a suitable landing area and an uneventful landing was made.

On August 30th a Bell UH1B assigned to the Little Joe Incident, Gallatin NF, R-1, had an IWP when it experienced a catastrophic engine failure during bucket operations. The pilot made an emergency landing in an opening near the area he was dropping water. The pilot was uninjured and immediately exited the aircraft. Other than the engine, no significant damage to the aircraft occurred. The pilot did an outstanding job of handling the emergency and making a good landing. After landing within the fire perimeter a ground fire was ignited by hot engine parts (turbine blades) that "blew" out the engine exhaust during the emergency landing. Ground firefighters working the fire were in the immediate vicinity and extinguished the ground fire with the aid of helicopter bucket drops from other helicopters working the fire at the time.

On September 5th a P2V-7 airtanker dropping retardant on the Ned Fire on the Salmon-Challis NF experienced an IWP. The approach was a steep downhill run and on recovery the aircraft continued to settle, possibly because of a combination of the winds, altitude, and high rate of sink. The aircraft skimmed the tops of trees and sustained minor damage including scratches along the right side of the fuselage, tank doors 2 and 3 sustained bent and broken linkages, the tank fairing was dented and punctured, there were dents on the right flap, and scratches on the lower side of the right engine cowling. The aircraft successfully returned to Missoula without incident.

On the 17th a Bell 205, UH-1H 1 performing bucket drops on the Spruce Mountain fire, Kootenai NF had an accident. After making approximately 40-50 bucket drops on the fire, the pilot, enroute to Troy for fuel noticed vibration in the aircraft. Post flight inspection of the rotor blades evidenced a strike about 3 feet in from the tip.



AIRWARD NEWS

In Recognition of Professional Performance during a Hazardous Aviation Event or Significant Contribution to Aviation Mishap Prevention

September 2001

No Mistakes



Steve Pedigo (right) presenting
Airward to Tom Landon (left)

Tom Landon, RAO for Region 2, was on standby for leadplane duty at Jeffco Airtanker Base. At approximately 1030 a dispatch was received for the leadplane and airtanker to the Jelly Creek Fire. Tom launched from Jeffco and the airtanker from Grand Junction Airtanker Base. As Tom arrived over the fire, he configured the aircraft for the leadplane mission and proceeded to make a practice run on the fire. After the initial run, he added climb power and noticed a hesitation in the left engine. He climbed to altitude, checked for the closest airport, and evaluated the aircraft for the malfunction. He noticed fuel streaming off the top of the left engine cowling. Tom immediately secured the left engine and flew to the Rangely Airport

and made a successful and safe landing. Tom's immediate in-flight emergency reactions and pilot actions may have saved the aircraft as well as the possible loss of life. As was stated in 1924 by the Army Air Corp, "Aviation is not inherently dangerous, however it is extremely unforgiving of mistakes." Tom made no mistakes! Thanks, Tom! [USFS SafeCom 01-522](#)

"Spooked"

On Friday, the 13th of July, 2001, BLM contract pilot Myles Elsing along with Brandon Hampton and Skip Young were conducting a G.P.S. mapping flight five miles west of Rogerson, Idaho when their Aerospatiale AS-350 B2 helicopter lost all hydraulic assistance to the flight controls. Myles was able to maintain control and land the helicopter at Twin Fall Airport without further damage. Brandon and Skip used their training in Crew Resource Management to assist the pilot with multiple radio calls and watching for traffic, allowing Myles to concentrate on controlling the helicopter and completing the emergency procedures. A great coordinated effort by all! By the way, the next time Friday the 13th comes around, you may find this crew at the golf course.



Brandon Hampton (left) Myles Elsing (right)

[OAS SafeCom 01-204](#)

Ships Ahoy!

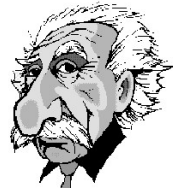


Bob Wofford, pilot, and Dave Seashore, copilot, successfully landed a Lockheed P2V after experiencing some mechanical difficulties. After departing Missoula where the aircraft had just received its 100 hour checkup, Bob and Dave both felt a lurch as the front landing gear retracted into the plane. When they arrived at Boise and began landing procedures, they floated into some rough waters. The front landing gear would not extend down. The control tower waived them off. Dave examined the landing gear and was able to push it into the locked position with a 2x4. It was smooth sailing from there on out. Bob landed the aircraft with no further complications. Nice sailing, Bob and Dave!

[USFS SafeCom 01-566](#)

Whoa Nelly!

Bill Gimler, district forester, canceled a scheduled flight to view the extent of recent windstorm damage. Bill was not Chief of Party qualified. He decided not to horse-around and rescheduled the flight for a later date after he was able to complete the training. Nice riding, partner!



No picture
available

[USFS SafeCom 01-474](#)



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SafeCom Summary

There have been 740 SafeComs filed this calendar year (January 1 – September 30) of which 633 are USFS and 107 are other agencies. Last year there were 874 of which 758 were USFS and 116 were other agencies for the same time period last year.

The following charts are based on SafeComs that occurred from August 1 through August 31 and September 1 through September 30 of this year and last year. There were 241 (215 USFS and 26 other agency) SafeComs reported this August compared to 316 (275 USFS and 41 other agency) SafeComs last August. In September there were 91 (81 USFS and 10 other agency) SafeComs reported this September compared to 74 (55 USFS and 19 other agency) SafeComs last September.

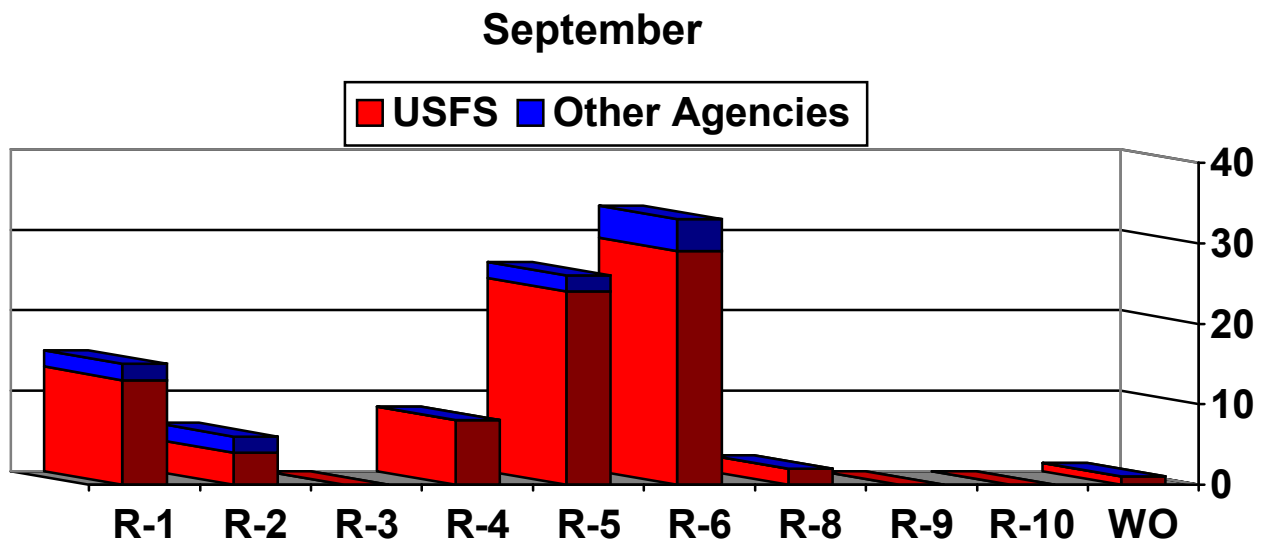
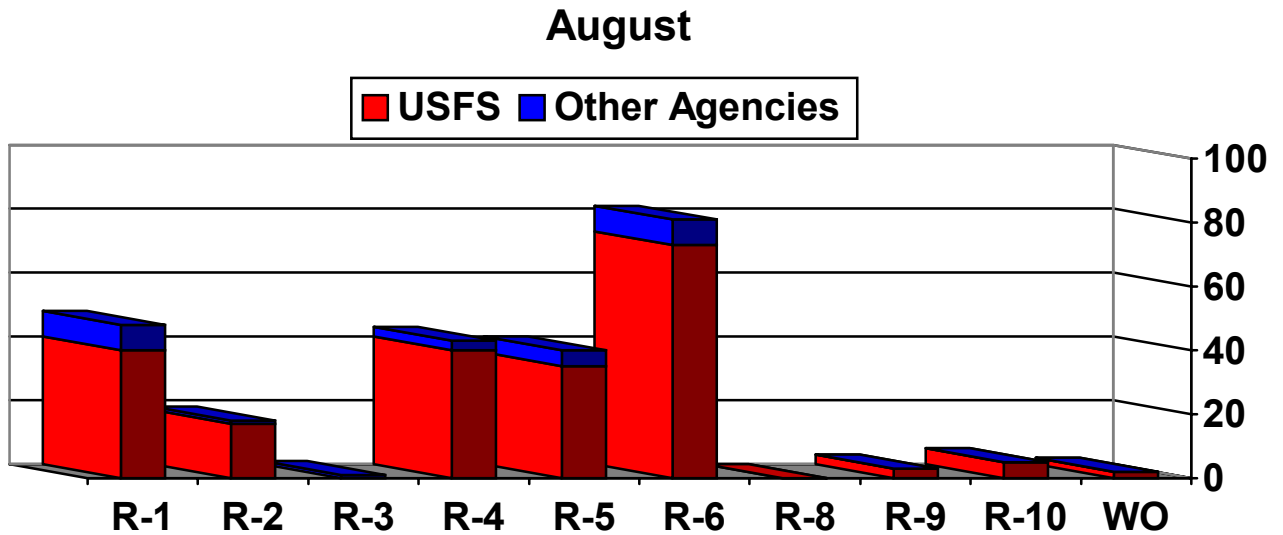
Included in this report are representative samplings of the SafeComs reported in August and September of this year. To view all the USFS SafeComs click on the link to SafeComs below. Pick the options you want to search for, then click on submit, or simply click on submit to view all of the latest SafeComs.

<http://www.aviation.fs.fed.us/safecom/psearch.asp>



SafeComs by Region

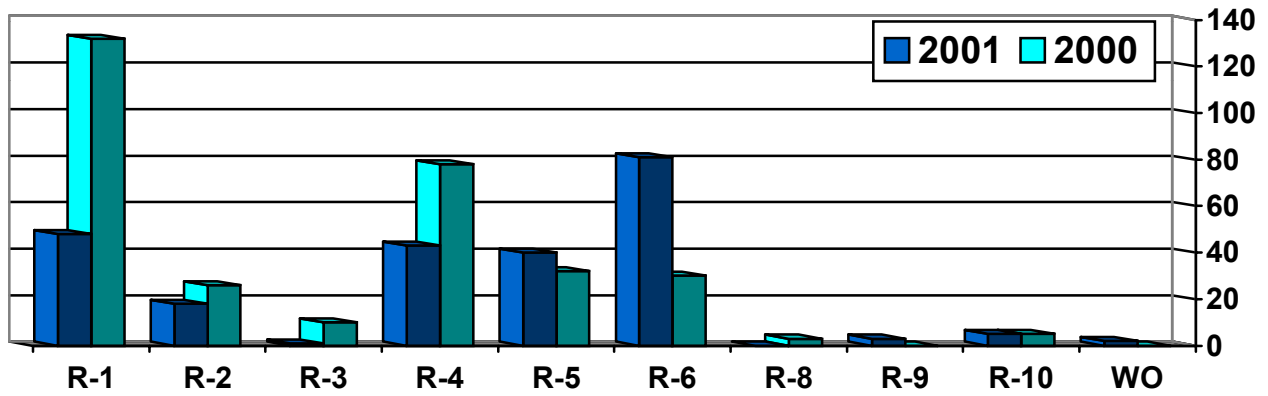
The charts below shows the number of SafeComs by region (FS and other agency) reported for August and September of this year.



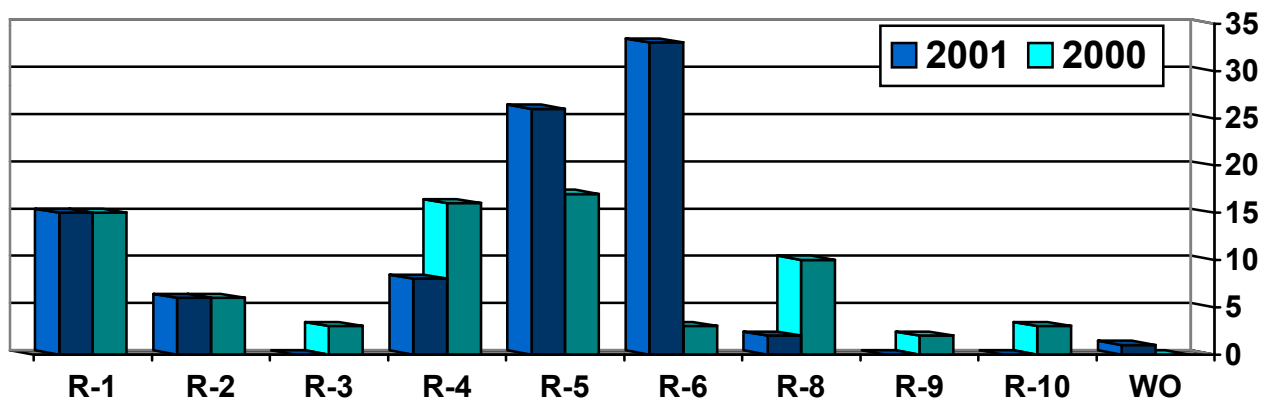
SafeComs by Region

The following charts show the total number of SafeComs reported by region for August and September of this year and last year.

August



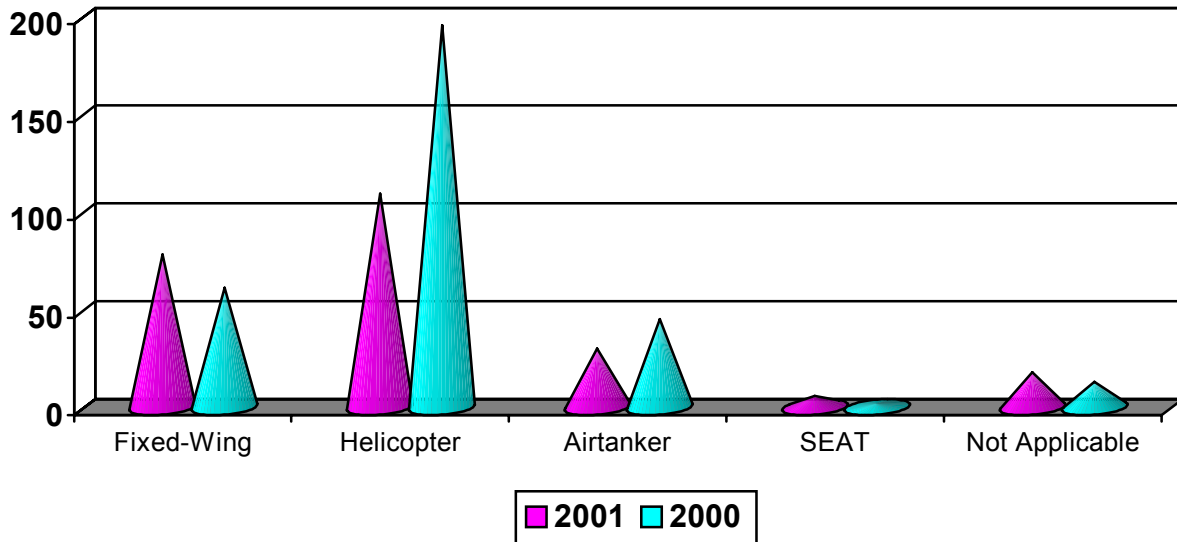
September



SafeComs by Aircraft Type

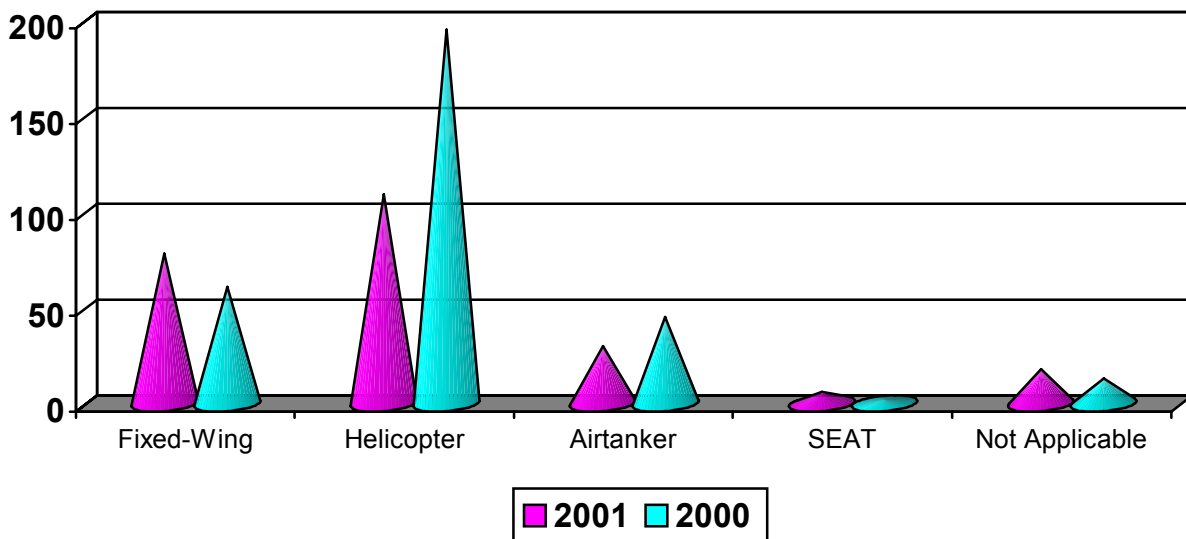
August

In August helicopter SafeComs accounted for 44% of the SafeComs this year compared to 62% last year. Fixed-wing SafeComs were up from 19% last year to 33% this year. The percent of Airtanker SafeComs were comparable at 13% this year and 14% last year. The chart below show the number of SafeComs reported by aircraft type for this year and last year.



September

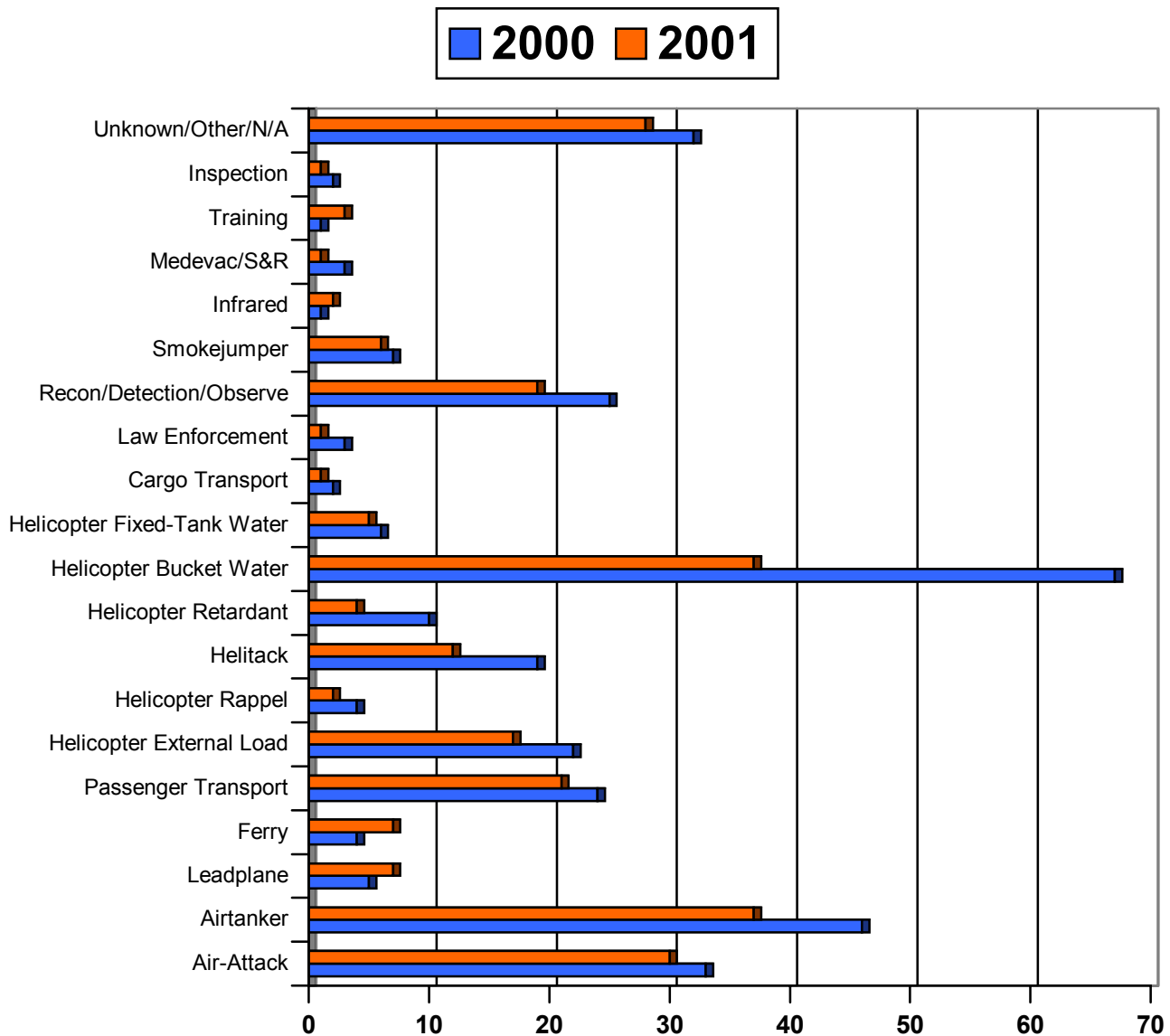
In September helicopter SafeComs were much higher accounting for 62% of the SafeComs this year and 73% last year. Airtanker SafeComs were comparable to August at 13%, but much higher than the 3% reported last September. Fixed-wing SafeComs were comparable, this year at 21% and 23% last year.



SafeComs by Mission Type

August

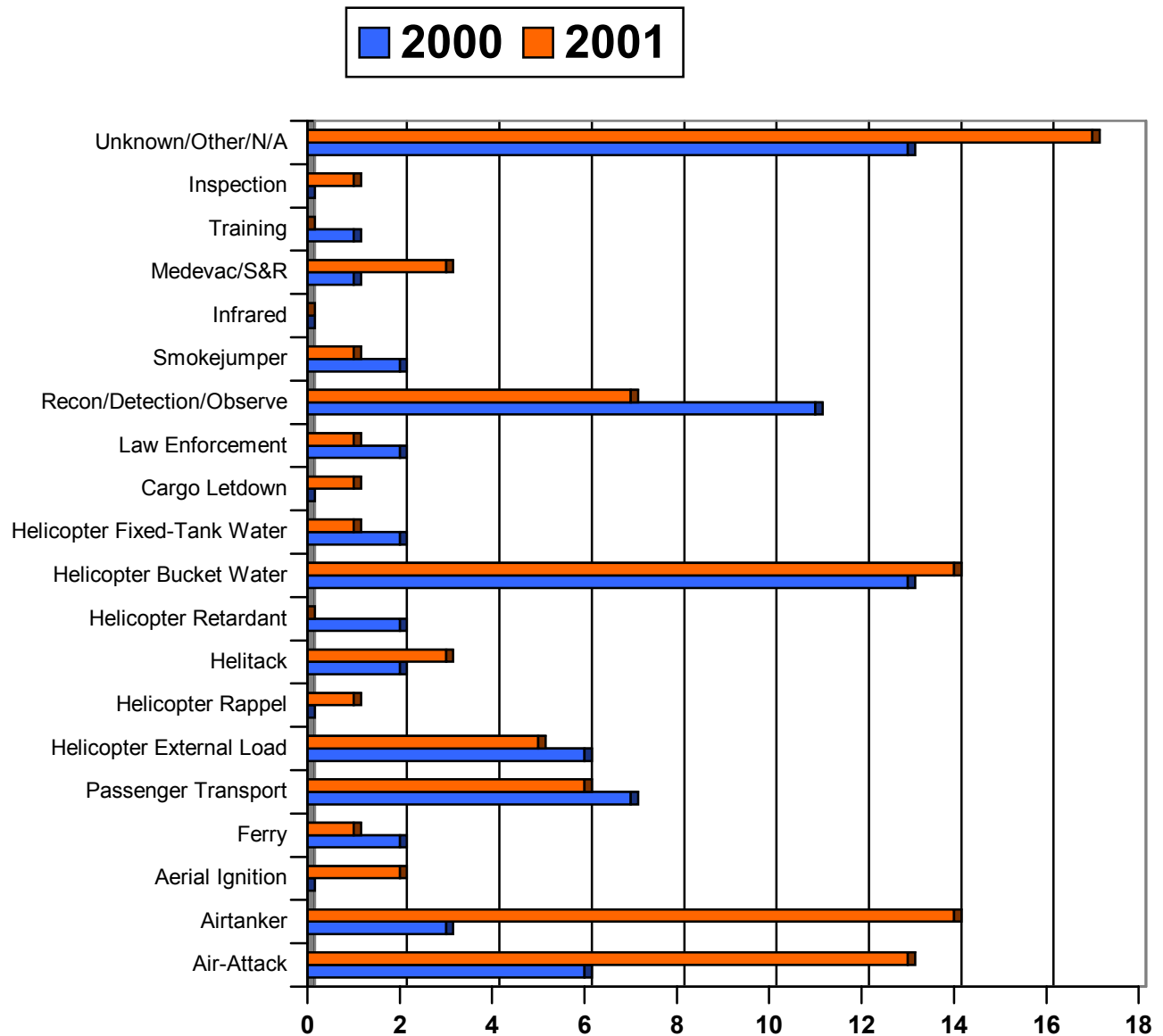
Airtanker retardant drops and helicopter bucket drops were equally the highest number of SafeComs reported this year. Last year helicopter bucket drops were far higher than any other mission. Air-attack followed by passenger transport followed behind Passenger transport SafeComs continue with the same trend, coming in third place. Helicopter External Loads and Air-Attack missions were both considerably higher this year compared to last year.



SafeComs by Mission Type

September

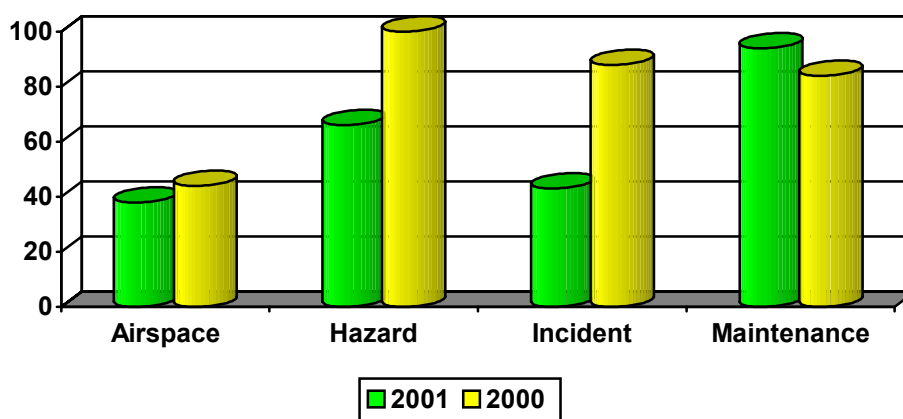
Airtanker retardant drop and air-attack mission SafeComs were significantly higher this year than last year. This year helicopter bucket drops and airtanker were equally the highest number of SafeComs reported. Last year helicopter bucket drops were the most reported followed by recon/detection/observation.



SafeComs by Category

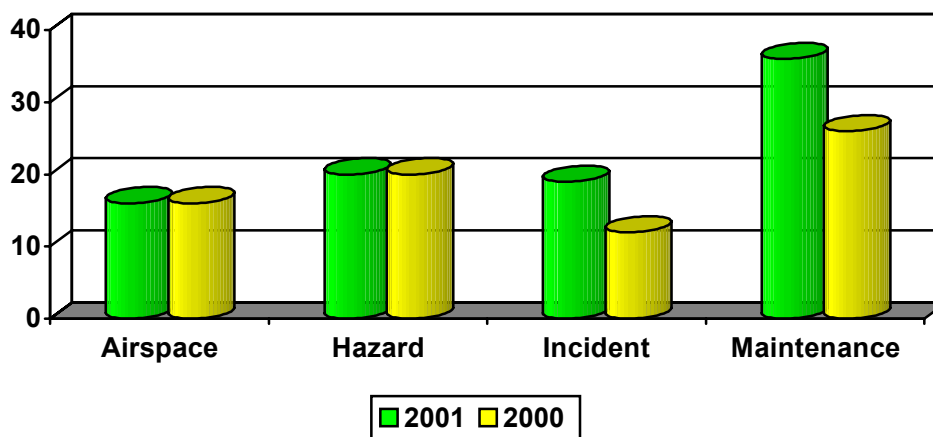
August

SafeComs on Maintenance are generally the most reported, which is true for this year, but last year hazard were the most reported. This year maintenance SafeComs accounted for 39% compared to 27% last year. Incident SafeComs accounted for only 18% this year compared to 28% last year. Hazard SafeComs were slightly less this year, down to 27% from 31% last year. The chart below shows the number of SafeComs reported by category for August of this year and last year.



September

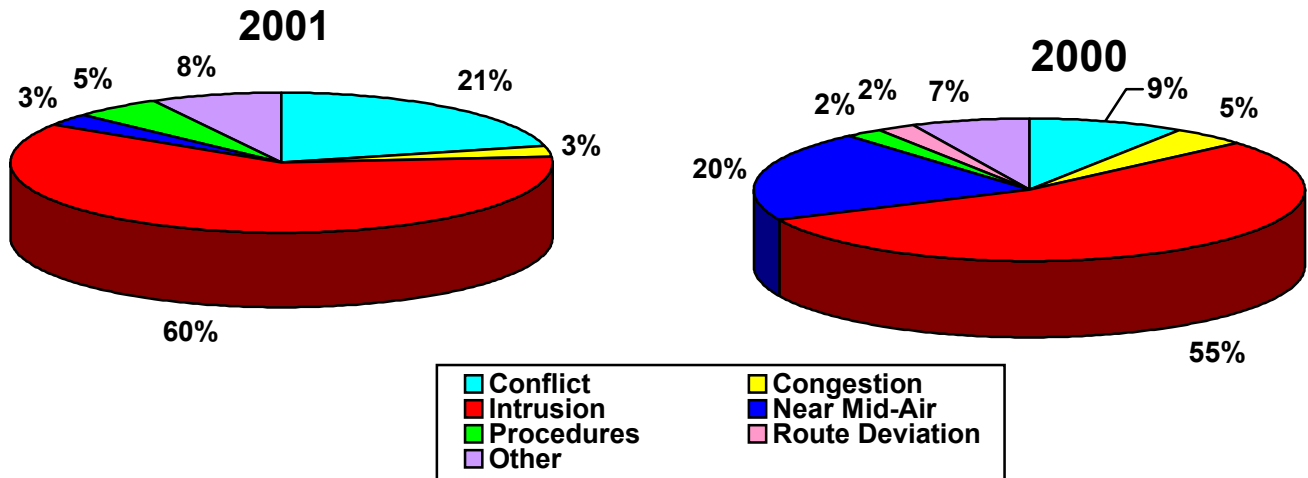
In September Maintenance SafeComs again were back in the normal trend of having the most reported for both years. Maintenance SafeComs accounted for 39% of the SafeComs this year and 35% last year. Hazards were the second highest at 22% this year and 27% last year. Incidents came in at 21% this year up from 16% last year, while airspace were down to 18% from 22% last year. The chart below shows the number of SafeComs reported by category for September of this year and last year.



Airspace SafeComs

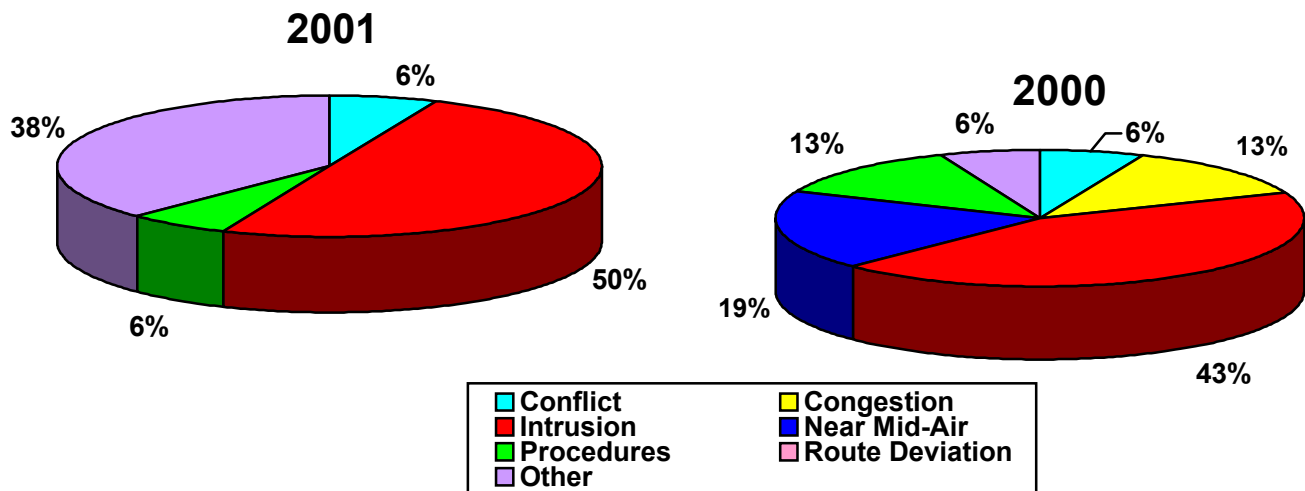
August

There were 38 SafeComs reported in this category in August this year compared to 44 last year. The best news is that the number of near mid-air SafeComs dropped to one this year from 9 last year. There was twice as many conflict SafeComs this year, 8 compared to 4 last year. There were 23 intrusions this year and 24 last year. The charts below show the percent of Airspace SafeComs by sub-category for August of this year and last year.



September

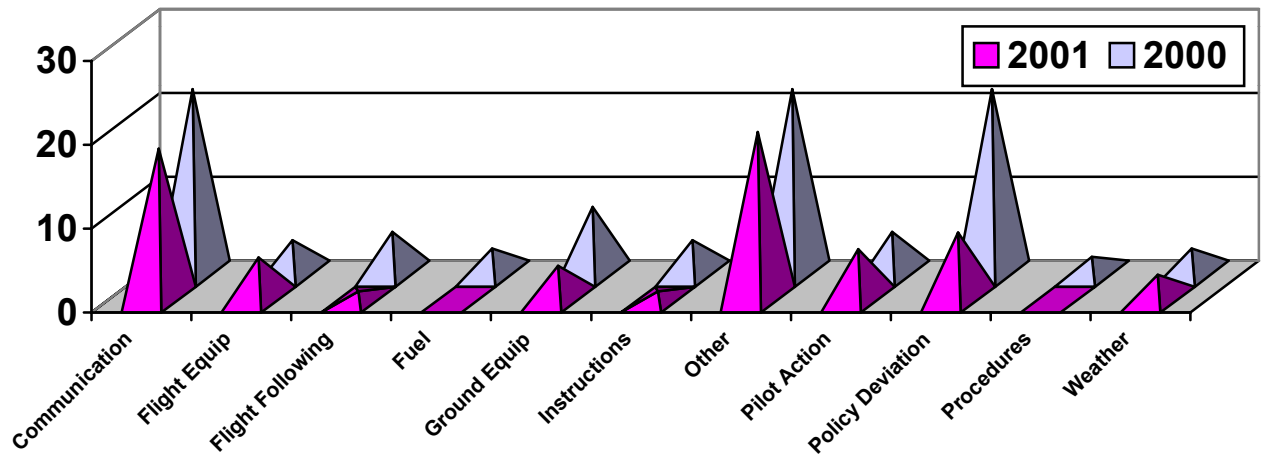
There were 16 SafeComs reported in this category in September for both this year and last year. NO near mid-air SafeComs were reported this year, there were three reported last year. Intrusions remain the highest reported in this category. The charts below show the percent of Airspace SafeComs by sub-category for September of this year and last year.



Hazard SafeComs

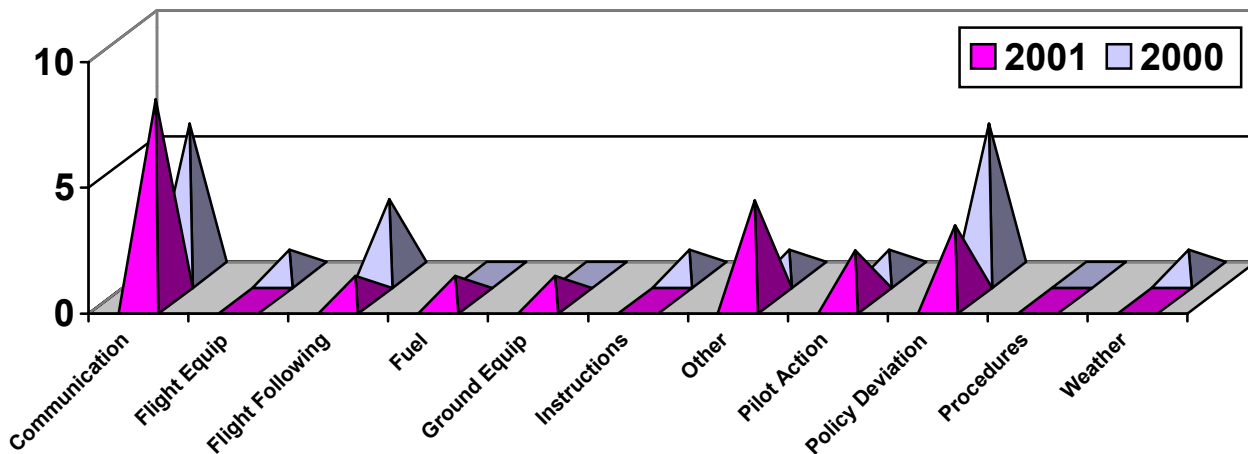
August

There were 66 SafeComs reported in this category this year compared to 100 last year. Communications, as usual continue to peak out in this category! They accounted for 28% of the Hazard SafeComs this year and 23% last year. Policy deviations were considerably lower this year, 12% this year compared to 22% last year. The chart below shows the number of Hazard SafeComs reported by sub-category for August of this year and last year.



September

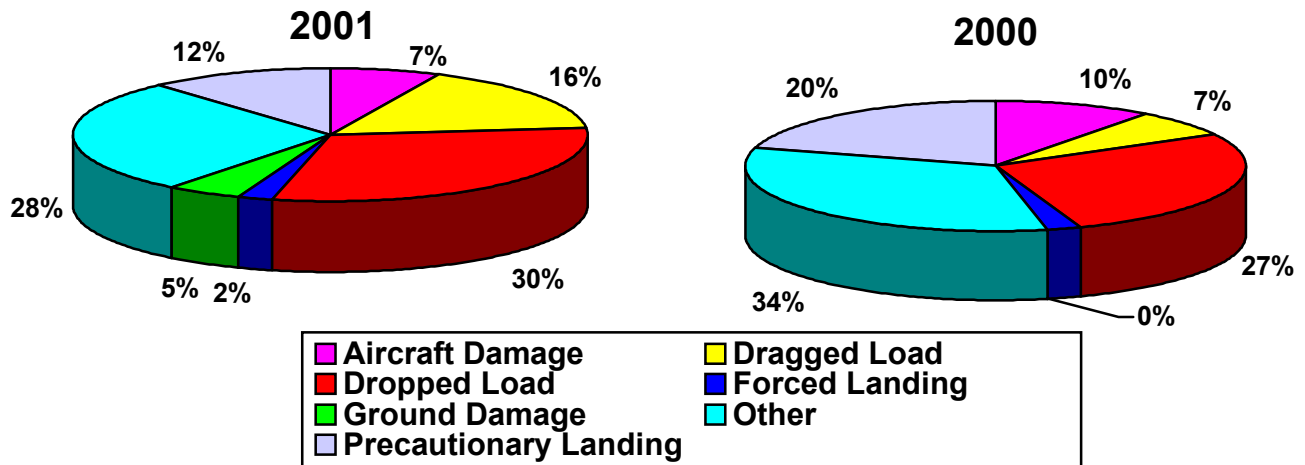
There were 20 SafeComs reported in this category both this year and last year. Communications accounted for 40% of the SafeComs this year and 30% last year. Policy deviation SafeComs were half of last year at 15% this year and 30% last year, and flight following was significantly lower at 5% this year from 15% last year. Pilot actions were twice as much this year at 10% from 5% last year. The chart below shows the number of Hazard SafeComs reported by sub-category for September of this year and last year.



Incident SafeComs

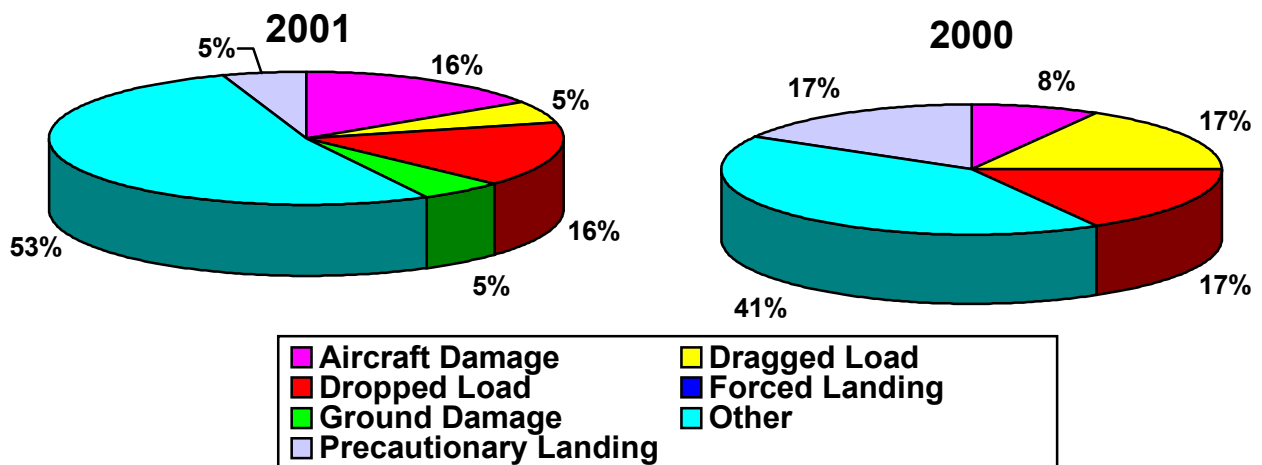
August

There was less than half the number of SafeComs reported in this category in August, 43 this year and 88 last year. Dropped and dragged loads accounted for almost half of the SafeComs in this category this year; dragged loads were significantly higher, more than double. The charts below show the percent of Incident SafeComs by sub-category for August of this year and last year.



September

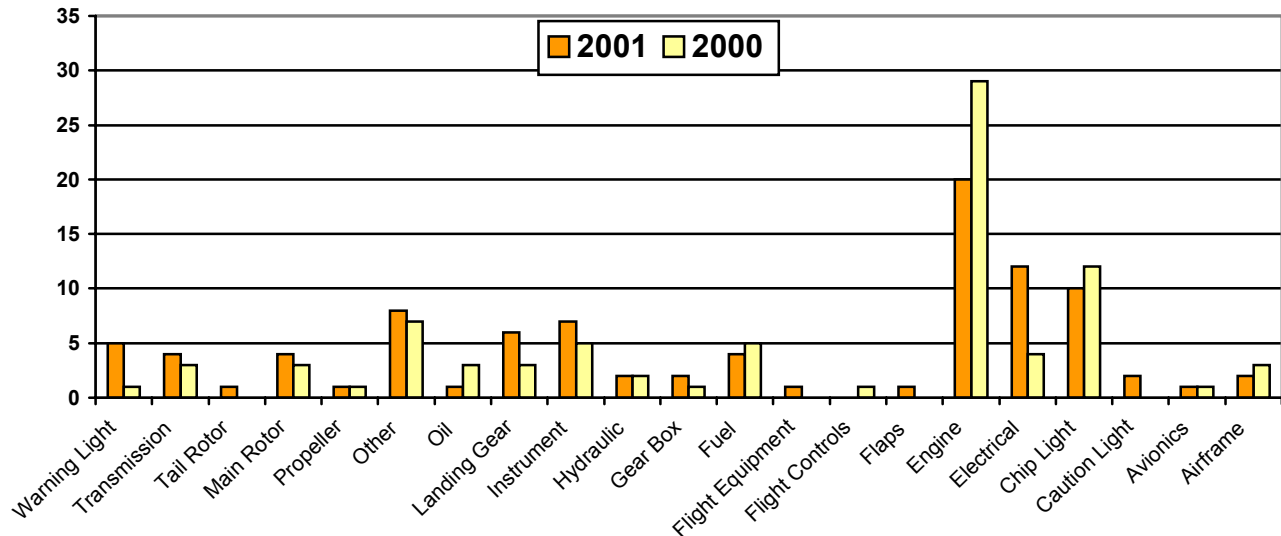
In September there were 19 Incident SafeComs reported this year compared to 12 last year. Dropped loads and aircraft damage were the most reported this year while dragged loads were down considerably from last year. Last year Dragged and dropped loads and precautionary landings were equally the highest. The charts below show the percent of Incident SafeComs by sub-category for September of this year and last year.



Maintenance SafeComs

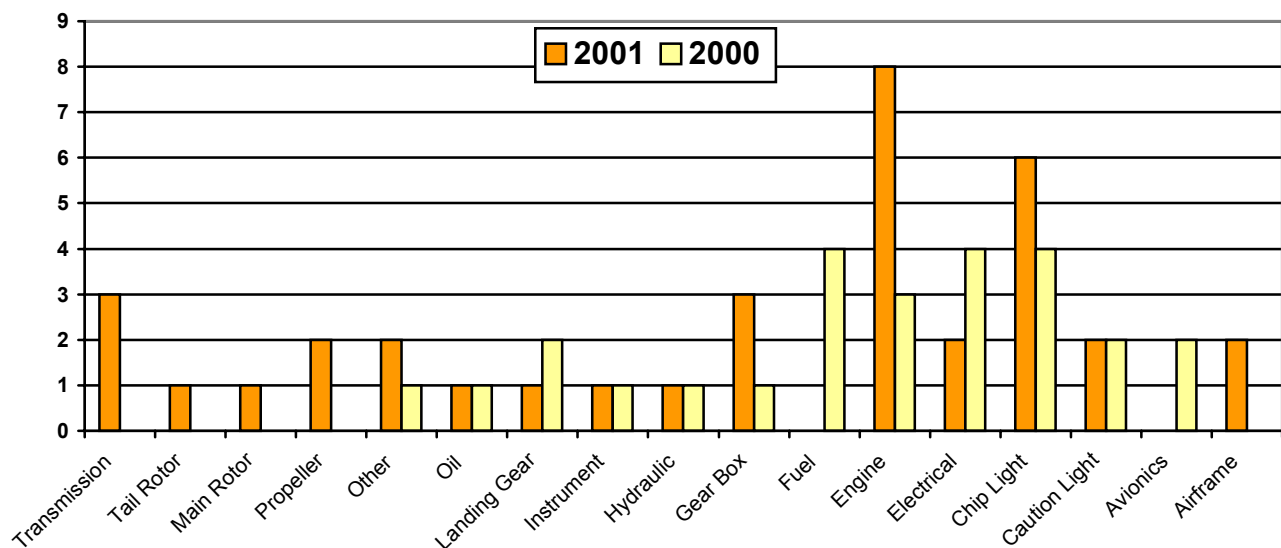
August

There were 94 Maintenance SafeComs reported this year compared to 84 last year. Engine followed by electrical then chip light were the most reported this year. Engine followed by chip light then instrument and fuel were the most reported last year. The chart below shows the number of Maintenance SafeComs reported by sub-category for August of this year and last year.



September

There were 36 Maintenance SafeComs reported this year compared to 26 last year. Engine followed by chip light were the most reported this year. Last year Fuel, electrical and chip light were equally the most reported last year. The chart below shows the number of Maintenance SafeComs reported by sub-category for September of this year and last year.



August SafeComs

SafeCom #: **01-441**

Date: **08/4/2001**

Time: **1520**

Location: **Keku Straits**

Region: **10**

Mission Type: **Fire, Passenger Transport**

Procurement: **Rental**

Aircraft Type: **DeHavilland DHC2**

Narrative: Finished up working on a small fire and loaded Beaver to return PSG. On take off taxi on the water, just as we lifted the nose of the plane, directly in front of us a humpback whale breached higher than the plane. We were looking at the whales "belly button"! Even his tail was completely out of the water. The pilot turned the plane to the left, luckily the whale fell to the right. The wing cleared the whale approximately 8 to 10 feet. This is very unusual because the water is very shallow where we were and whales have not been seen breaching in between these islands in the past. Both the passengers felt comfortable with the pilot's evasive actions. We hope this never happens again, there was no way to know the whale was even in the water. We couldn't hear it because of the noise of the plane.

Corrective Action: RASM - Will counsel the whale when found and identified on the FAA right of way requirements. All kidding aside, it was appropriate to file a safecom on this issue. Flying and working in Alaska does present FS employees with unusual challenges and risks. Anytime aviation resources are being used to accomplish a program of work - everyone needs to be vigilant to the "usual" hazards encountered while flying in Alaska (weather, overloading, inadequate landing site selections, air traffic congestion, demanding terrain, get-home-itis, etc....) and also the "once in a career hazards, both can kill you".

SafeCom #: **01-591**

Date: **08/24/2001**

Time: **1030**

Location: **Mollie Fire Helibase**

Region: **4**

Mission Type: **Fire, Passenger Transport**

Procurement: **Contract**

Aircraft Type: **Piper PA18**

Narrative: A TFR 91.137 violation was reported by helibase manager and helicopter NXXX. A yellow SuperCub landed at Spanish Fork Airport (U77) and was "greeted" by the ASGS for Type 1 Team. I asked the pilot if he was flying over Payson Canyon and Walker Flats. He admitted he was, but when he saw the helicopter he left the vicinity. He further stated that he thought the fire was out. I asked him if he circled over Payson Helibase and he said no, it was a white Husky. I then asked the NYYYY pilot if he had checked the NOTAMS for TFR's. He said no, he had not checked any NOTAMS. I then stated that it was required the myself, as the ASGS, to file a SAFECOM for the incident. The pilot said "Fine, notify the FAA", "Bring 'em on!". I further stated that TFRs are in place for your safety, and the safety of fire aviation personnel, both in the air and on the ground. He then proceeded to turn and walk away.

Corrective Action: RASM Remarks: Unacceptable. FAA has been advised, 9-13-01. 10-02-01, I spoke with a FAA Safety Inspector that followed up with the vendor. Vendor was VERY apologetic and wishes that he had the opportunity that day to start the conversation all over again with the manager. The Inspector stated that he had reiterated the importance of the TFR and also stressed proper preflight planning, checking NOTAMS and TFRs. The FAA Inspector also pointed out the current guidelines for enforcement actions for pilots not following the NOTAMS. The Inspector spent 30+ min. on the phone with the pilot and felt the pilot truly was apologetic and had learned a valuable lesson. No enforcement action was taken. No further action.

SafeCom #: **01-426**

Date: **08/1/2001**

Time: **1330**

Location: **Ketchikan**

Region: **10**

Mission Type: **Passenger Transport**

Procurement: **Contract**

Aircraft Type: **DeHavilland DHC2**

Narrative: [report by pilot] Aircraft took off runway 11 straight out / should have stayed over land but came down center of channel against traffic - potential head on / less than 200' miss [report by passenger] Here's a short writeup on the incident yesterday. At approximately 1:30 pm we were returning from Quartz Hill in Misty with five passengers in 60G. We were traveling northbound and descending on the west side of Pennock for our turn and landing on the harbor. I was sitting in the middle seat on the right side of the plane behind the co-pilot seat. I was looking toward the east and Ketchikan and briefly saw a plane off our right wing travelling south over the east side of Pennock. The plane then turned toward our position flying over the island and the next thing I felt was a sudden ascent. We then leveled off briefly before descending again for our landing. Once we leveled off I could see that the other plane had passed in front or under us (I'm not sure) and was climbing headed north. It happened quickly and I never felt in danger because I wasn't able to see how close the plane passed in front of us. However, I did see the plane fly over Pennock toward us and then pass in front. The plane did seem rather close. The pilot indicated he talked to the other pilot but I didn't hear the conversation. That's about all I can recall that seems relevant to the incident. If you need any additional info let me know or you could call the others that were in the plane. I'm not sure any of us were paying as much attention as we should be considering the number of independent operators etc. out there these days. FAO comments: The aircraft departing the airport did not follow established traffic patterns and flew within approximately 200 feet of the Forest Service contracted floatplane. FS pilot later reported the near miss to Flight Service Station. Ketchikan International Airport is located on another island in close proximity to the Ketchikan waterfront. The Ketchikan waterfront is a high use floatplane traffic area. There are published traffic patterns for this Class E airspace.

Corrective Action: RASM - passengers need to assist the pilot in spotting aerial hazards especially in high traffic areas as discussed in the aviation user training class. Don't assume the pilot has spotted another aircraft - let him/her know if you spot a hazard.

SafeCom #: **01-546** Date: **08/20/2001** Time: **1130**

Location: **Glen Oaks Fire** Region: **Cooperator**

Mission Type: **Fire, Retardant Drop (Airtanker)** Procurement:

Aircraft Type: **multiple aircraft**

Narrative: While I was supervising a somewhat complex air show (two tankers/no lead, 5 copters, numerous media ships and much transient traffic + transmission lines etc.) over the Glen Oaks Fire, (Angeles National Forest IAZ with LA County and LA City Fire) I had a situation occur involving LA City Copter 5 who was performing helicopter coordinator duties. I notified Helco to move his copters to the east to clear for Tanker-22. (media ships were placed on other side of freeway from the fire) After area was clear, Tanker-22 dropped 1/2 load as requested by me. As Tanker-22 was on base for second 1/2 of load, I observed numerous tactical copters in the drop area. I contacted Tanker-22 and told him that there were copters in the drop zone. Tanker-22 was able to extend his line(base) while I contacted helco and told him in no uncertain terms to move his copters to the east and keep them there until he heard from me. Once area was clear Tanker-22 was able to complete his mission. When I made contact with helco (on VHF) I asked him what was his name. He replied "Harris". I then said "Mr. Harris that is not the way we do business and to never clear copters into an area without hearing from me first" Mr. Harris claimed he needed fuel and did not return to the fire for the rest of my shift. He was replaced by LAC Copter 14 as helco. Major potential but all turned out well enough. Planning a meeting soon with LA County and City Fire Dept. Air Ops overhead to fix an on going problem.

Corrective Action: Even though the ICS system has been in place for a number of years, not all the players know all the rules of the game. It appears that the Air Attack took firm control of the situation. RASO concurs with the intended meeting to bring everyone up to speed. FAO should take the lead in this. No further action required at this time. RASO, R-5

SafeCom #: **01-629** Date: **08/28/2001** Time: **2030**

Location: **Omak Airport** Region: **6**

Mission Type: **Helitack** Procurement: **CWN**

Aircraft Type: **Bell 206L3**

Narrative: At 1945 a report came in that a crewmember had been left on the fire alone. He was directed to walk out the line to a road, but as a result of being fatigued, and the uncertainty of direction the crewmember relayed that he didn't think he could get to the road.

The decision was made by the Helibase Manager to launch the helicopter to a helispot near the crewmember, off load a helitack crewperson to assist him on the ground, and the way out. The Helicopter completed the mission successfully, but in doing so landed at the Omak airport seven minutes after the designated shutdown time for helicopters to be on the ground. (20:24, thirty minutes after sunset.) Shut down was 20:17. The Helibase Manager was aware that the ship may be landing back at the airport after the designated landing time, and accepts all responsibility, but felt it was a life threatening situation, and was necessary due to bears in the area and steep rocky terrain. Solutions include: Crewperson on the hill needs to be better aware of situations and route to road. Helibase Manager needs to communicate with Operations better to ensure crews leaving the hill are not left up there. Comments from the acting AOBD include: There were a couple of options available to eliminate leaving the helitack person on the hill by himself, as well as reasons for bringing him down off the hill, all of which could have been safely done. Unfortunately the wrong solution was chosen. A meeting was held with the acting AOBD, ASGS, HEBM, crewmember and pilot involved. The discussion pertaining to the incident included: Everyone needs to be aware of what is going on around them, and act accordingly. Everyone also needs to recognize their own physical limitations as far as fatigue and let someone know. The end result is to shut down operations of helicopters 15 minutes before "Pumpkin Time, I am still not convinced this was a life threatening situation."

Corrective Action: RASM: awaiting more info.

SafeCom #: **01-451**

Date: **08/7/2001**

Time: **1700**

Location: **Porcupine Creek #27 Fire**

Region: **1**

Mission Type: **Fire, Retardant Drop (Airtanker)**

Procurement: **Contract**

Aircraft Type: **Lockheed P2V7**

Narrative: "This airplane is shaking real bad and I don't know why!" That is the first thing Lead heard after the tanker dropped his first two doors on the fire. The time was about 1700 on 8/7/01. It was the tanker's second trip to the fire. Lead arrived at the fire just as the tanker completed his first drop. The decision to load and return was made and when the tanker returned, Lead conducted the normal brief and provided a show-me run on that same spot fire a helicopter had been working on. Getting to the drop site required a significant descent which put Lead way down in the valley, so it took a long time to climb out. The tanker asked where Lead was and at the same time announced he was on a base to the drop. The tanker continued with the run and Lead could see him on the base leg turning final. Lead watched the two door drop. Not long after the tanker was on the exit he made the radio call, "This airplane is shaking real bad and I don't know why!" Lead immediately told the tanker to punch off the remainder of the load which he did. The tanker captain said it felt like the airplane was in a stall. Not long after that, the captain announced he found the problem to be the life boat access door on top of the left wing between the left engine and fuselage had come open. At the end of the valley on the exit a right turn was required. Lead informed the tanker to turn right at the end of the valley as briefed earlier. The captain said he had to go left because the tanker wouldn't turn right. Lead said, "You have to turn right". The only way out was right unless enough altitude was gained to clear the ridges that formed the bowl if a

left turn was made. After retracting some flaps, the tanker captain informed Lead that the shaking wasn't as bad and that he could turn right. After having successfully negotiated the exit, Lead informed the tanker that he would follow him to landing. The initial decision to go to Coeur'd Alene was scrapped after the tanker captain decided that the airplane flew better with no flaps. Due to construction on the runways at Coeur'd Alene, there wasn't a long enough runway to accomodate a no flap landing. Lead informed the tanker that his options were Spokane Intl. (GEG) or Fairchild Air Force Base. The tanker decided GEG. About 40 miles out from Spokane, Lead contacted Spokane Tower and declared an emergency for the tanker. The tanker made a no flap approach and landing and a one engine reverse landing roll with the opposite engine. The landing was uneventful.

Corrective Action: The tanker crew determined that a small pin in the handle on the door latching mechanism had fallen out, allowing the mechanism to slide open enough for the lugs to back out of their receiver holes. The tanker captain had another pin on board the aircraft that required a small amount of grinding to make it work. The mechanism was reassembled, the door closed, and all five lugs that hold the door shut were then safety wired in place. The appropriate call to Region 1 Maintenance Inspector was made for "Return to Contract Availability." At about 1930 both tanker and lead departed Spokane International for their respective bases. RASM Remarks (From R-4), Further information from the Vendor's DOM: The Door in question is the Life Raft door that is mounted on the top side, inboard section of the wing applicable to only the -7 model of the P2V. This vendor removed the "tub" that cradles the life raft when in place. The vendor suspects that the air loads assisted normal vibrations to ajar the latch that secures the door. Corrective action was to perminately secure & safety wire the latch to ensure this dosen't happen again. Great Job by all getting the aircraft on the ground and good fix by the company to ensure this doesn't happen again! Please spread the word! No further action.

SafeCom #: **01-575**

Date: **08/24/2001**

Time: **1415**

Location: **Provo, Utah; City Airpoirt**

Region: **Other**

Mission Type: **Fire, Air-Attack**

Procurement:

Aircraft Type: **Cessna T210L**

Narrative: Cessna NXX was returning to land for fuel at the Un-Controlled, Prove, Utah city airport at 1415 hours on Friday, 24 August 2001. Three additional aircraft were in the Traffic-Pattern for the active Runway 31 and two more aircraft were inbound on the ILS 13 Approach. VFR conditions existed throughout Northern Utah with CAVU. Cessna NXX entered the Traffic Pattern at mid-field, left-downwind, Runway 31 at pattern altitude. The aircraft in the traffic pattern and on the ILS Approach were a mix of single and light twin General Aviation and Training flights. Cessna NXX gave radio position reports on the CTAF of 122.8 for 1) Entering Left Downwind Runway 31 Provo, 2) Left Base Runway 31 Provo and 3) Short Final Runway 31 Provo. As Cessna NXX crossed the runway numbers for Runway 31 a new model white pick-up truck was driving towards N93155 across the grass between Runway 31 and the General Aviation ramp at a high rate of speed and stopped before crossing Runway 31 just as Cessna NXX was in a landing touch-down. One or two seconds after touchdown Cessna NXX rolled-out along Runway 31 no more than a few yards from the,stopped, White, City of Provo; Utah Pick-up Truck. After Cessna NXX had

passed the Pick-up Truck continued its path across Runway 31 and onto the grass again towards the southwest corner of the airport. Cessna NXX called clear of Runway 31 on the CTAF and taxied to Advantage Aviation for fuel. While re-fueling at Advantage Aviation this same Pick-up Truck continued to drive recklessly at excess speeds along the taxi-ways and General Aviation parking ramps. The Line Fueler for Advantage Aviation identified the operator of the White, City of Provo, Pick-up Truck as the: Assistant Airport Manager for the Provo, Utah Airport. (On board Cessna NXX was the USFS Pilot R-4 and the AtGS "Air Attack", Pike N.F. R-2.)

Corrective Action: RASM Remarks: I got ahold of the person driving the pickup truck, this was the assistant airport manager. The manager stated that he had received a report of animals on the runway and he went to check this out. I conveyed to him the pilot's concerns of his approach to the runway when there was an aircraft on final. The manager was very apologetic about the situation and stated that he was a little "lax". I stated that an appropriate action would have been to report the animals to the airman on unicom, and to also report your intentions when driving on the tarmac to the airman. He agreed and again apologized for being lax about procedures, NO further action, 9-07-01.

SafeCom #: **01-584**

Date: **08/16/2001**

Time: **1630**

Location: **Bridge Creek**

Region: **6**

Mission Type: **Fire, Retardant Drop (Airtanker)**

Procurement: **Contract**

Aircraft Type: **Lockheed P3**

Narrative: On 08/16/01 about 1630 hrs. Tanker 25 was asked to make a drop on the Bridge Creek fire. The drop was down a steep slope into a canyon. The escape was a climb up into the canyon. The drop was about 1/2 way down the slope. This was the last drop before fueling. The entire load was dropped. The climb out was easy with the empty aircraft with minimal fuel. The next load was dropped to extend the line of the last load. This required extending the line to the bottom of the canyon. This required only 2/3 of the load. The aircraft was at the lowest altitude in the canyon with 1/3 load on board with a heavy fuel load. The escape route (canyon) had a high voltage transmission line that crossed up canyon. PIC had seen the line from above and was told it was there by the lead plane. However, the smoke haze made the line hard to see when climbing out of the canyon. With the reduced performance of the heavy aircraft and unable to see the exact location of the power line, PIC elected to drop the remaining retardant to insure a safe climb out of the canyon. This was not an emergency it was a precautionary move to prevent an emergency. PIC of T-25 briefed LD ATB manager of the above event upon arrival at base. Base Mgr. had already been notified by NOIDC.

Corrective Action: RASM: Good actions by the crew. We want our crews to make safe decisions as this crew did. No additional action.

SafeCom #: **01-474**

Date: **08/10/2001**

Time:

Location: **Manistique, Michigan**

Region: **9**

Mission Type: **Survey/Observation**

Procurement: **Contract**

Aircraft Type: **N/A**

Narrative: A flight had been scheduled with a local approved contractor for a district forester to view the extent of recent windstorm damage. The forester, xxxx xxxxxx, in discussion with dispatch stated that he was not Chief of Party qualified, and felt it wise to cancel the flight until such time that he was able to complete that training. The flight will be rescheduled for a later date.

Corrective Action: No corrective action needed. Thanks to that individual for his recognition and avoidance of an action that would have compromised standards. Sometimes a Safecom can be good news. This Region is presently going through some increased awareness due to higher frequencies of incidents and one accident. This recognition of the need to be adequately trained for aviation safety FIRST - then proceed with mission accomplishment is commendable. An Airward will be presented at that unit's safety standown this week. No further action required.

SafeCom #: **01-631**

Date: **08/26/2001**

Time: **1530**

Location: **Bell Fire**

Region: **5**

Mission Type: **Fire, Reconnaissance**

Procurement: **CWN**

Aircraft Type: **Cessna 182**

Narrative: While flying recon over the Bell Fire, the aerial observer noticed that the aircraft was losing elevation. When the observer turned to look at the pilot, the pilot's eyes were closed and his head was tilted slightly forward. Within 3-4 seconds after looking at the pilot, he tensed slightly as he raised his head and his eyes reopened, and he returned the aircraft to a level position. The recon flight continued with out further incident, however the observer paid close attention to the pilot's state of being. The previous flights that occurred over several days, averaged 1.5 hours in length, and the pilot took naps in between flights. On this day the flights were extended to an average of 3 hours, and the incident occurred during the second flight of the day. During a discussion between the observer and the pilot regarding his release and this incident, the pilot commented that this was not the first time he had fallen asleep while flying and perhaps he should consider ending his flying contract. The pilot was released from duty the next day. A discussion with the R5 Aviation Safety and Training Officer revealed that this was not the first incident where this pilot fell asleep during a mission.

Corrective Action: This problem has been resolved to the satisfaction of all parties. RASO, R-5

SafeCom #: **01-425** Date: **08/3/2001** Time: **1315**

Location: **Krassel Helibase** Region: **4**

Mission Type: **Fire, Rappel** Procurement: **Contract**

Aircraft Type: **Bell 407**

Narrative: During training rappel both rappel ropes went into trees when the helicopter drifted due to winds. Both rappellers were instructed to re-buckle their seat belts, disconnect from thier Genies and unrig them from the ropes. The spotter released both ropes and landed without incident.

Corrective Action: The primary purpose of submitting this Safecom is to reiterate the importance of training and procedures for non-standard rappel situations. Both rapplers responded well to a "different situation". A recent Safecom indicated this same scenario occurred but the rappellers had not buckled in prior to diconnecting from the ropes. Training, training, training. ...RASM Remarks: I applaud the submitter for getting this information into us to share with the community the importance of training (and recurrent training) to aid in the unexpected scenario. Procedures were followed, Great job team! No further action.

SafeCom #: **01-417** Date: **08/3/2001** Time:

Location: **Houston-Rolla, Distict MTNF** Region: **9**

Mission Type: **Law Enforcement** Procurement: **Military**

Aircraft Type: **Bell OH58A**

Narrative: On August 2, 2001, a National Guard UH58A helicopter flew National Forest lands searching for cannibus. One Forest Service Law Enforcement Officer and the Phelps County Sherriff were on board during the entire mission. At the end of the mission, the Helicopter flew back to its home unit in Jefferson City Missouri. Nothing unusual was noted during the post flight inspection. During a scheduled washing on August 3, 2001 at 0815, a small hole was noted in the tail boom. It was determined that the helicoter had been shot by a small caliber weapon, probably a .22 caliber. The damage was about one foot aft of the body of the helicopter at about the 4 o'clock position. Had the bullet not hit a structural panel it would have penetrated and exited the tail boom.

Corrective Action: The aircraft has been eliminated from the list of approved aircraft until it can be determined that the repairs are consistent with Bell Helicopter manufacturing

specifications. Law enforcement is investigating and has stood down from placing Forest Service personnel on Raid Unit helicopters in that area until further notice. Repair has been made by the MO Guard unit and approved by the WO maintenance manager for return to use by LEI. The Army Guard Unit also identified more restrictive temporary procedures to reduce risk of re-occurrence. No further action

SafeCom #: **01-560** Date: **08/21/2001** Time: **1520**

Location: **Big Creek Fire** Region: **6**

Mission Type: **Fire, External Load (Belly Hook)** Procurement: **CWN**

Aircraft Type: **Bell 212**

Narrative: 23 Victor topped saddle doing bucketwork. The aircraft was too low, causing his bucket to break approximately eight feet off the top of a dead snag. 23 Victor also dropped on firefighters without direction or being called. Many drops were made from too far above the fire while moving and dropping water without direction.--Division A trainee This safecom was given to me at 2130, on 8/22/01. The morning of 8/22/01, during morning briefing, after listening to personnel talking on radios, helibase was asked to talk to pilot about making contact with ground forces, before dropping water, and to make certain of where his drops were to be delivered. On 8/22/01 during operations, pilot was asked to slow down and notify personnel where he was dropping. The pilot then flew to Frazier Helibase and shut down.

Corrective Action: The Air Attack Group Supervisor worked with the relief pilot during the second day of operations. The relief pilot continued to improve with his efficiency but still needs more time doing bucket operations in flatter terrain and get comfortable with procedures. The pilot should possibly be given another check ride while doing bucket operations in mountainous terrain and make sure ground forces are talking pilots into drop locations with good clear communications on where drops need to be made.--Air Support Group Supervisor RAASM: Action taken. Back in service.

SafeCom #: **01-464** Date: **08/2/2001** Time: **1330**

Location: **Green Knoll Helibase** Region: **4**

Mission Type: **Fire, External Load (Longline)** Procurement: **Contract**

Aircraft Type: **Bell 206L3**

Narrative: At 1330 hrs. helicopter was bringing a 600 lb. back haul load of hose from Div. alpha. 1/4 mile from Green Knoll Helibase the load came off the remote hook and landed next to the road. On inspection of the remote hook it was determined by the helicopter manager that the spring gate was stuck open and as the load began to swing it came off the hook. It appears the hook was not properly checked after the load was hooked by the division Alpha personnel.

Corrective Action: The helicopter manager inspected the remote hook and determined that the ears on the spring gate had spread causing the gate to stay open. The ears on the gate were bent back into the proper position and tested. Hook was put back into service and performed satisfactorily. Hooks return to contractual availability was approved by R-3 Maintenance Inspector. RASM Remarks: No further action.

SafeCom #: **01-532** Date: **08/19/2001** Time: **2105**
Location: **S59 - Libby Airport** Region: **1**
Mission Type: **Fire, Air-Attack** Procurement: **Contract**
Aircraft Type: **AeroCommander 500**

Narrative: On 8/19/01 Air Attack 71D, an Aero Commander 500A, with ATGS and Pilot were dispatched to an IA fire at Red Mtn, Kootenai NF and were airborne at 1551. Operations were normal over the Red Mt. Fire. At 1952, Air Attack 71D departed Red Mtn to return to the Libby Airport (S59). Enroute a new fire was detected (Gold Hill) at 1959. A heavy air tanker was ordered to hold the fire over night. T10 was clear of the fire at 2050, and after lining out ground access, 71D departed the scene at 2057 enroute to S59. At 2105 over the town of Libby, 71D lost one engine and subsequently the other engine. Pilot started emergency procedures and ATGS declared a Mayday to Kootenai NF dispatch. After switching on the boost pumps, the engine regained power and the aircraft was 3 1/2 miles straight in to runway 15. At approximately 1 1/2 miles, ATGS notified dispatch they would make the runway with intermittent power. Pilot pulled power and props on short final and made an outstanding power off landing. ATGS notified dispatch they were ok and requested that dispatch notify the proper management and safety officials. Based on prior fuel calculations, it was thought there was over seven hours of fuel on board, 156 gallons. The aircraft was towed to the pumps at S59. The aircraft was fueled to 146.8 gallons, turned around and approximately 4 more gallons were put in the aircraft for a total of 150.8. Refueling was done by the FBO and witnessed by the Libby HEMG. ATGS notified his FMO by phone and left messages to the Acting State Aviation Officer (BLM Montana) who returned the call at 0730 8/20/01. The Acting State Aviation Officer notified OAS and the pilot notified NTSB.

Corrective Action: RASM Comments: An investigation team has been assigned to this Incident with Potential and a report will be forthcoming.

SafeCom #: **01-520** Date: **08/12/2001** Time: **1200**
Location: **Warren, Idaho** Region: **4**
Mission Type: **Fire, Passenger Transport** Procurement: **Contract**
Aircraft Type: **Bell 407**

Narrative: After demobilization of several initial attack fires, helicopter departed Warren Airport to McCall for fuel. Prior to landing in McCall the Forest Law Enforcement Officer called dispatch to inform them an object had fallen from the aircraft as it passed overhead and had broken his front windshield on his personal vehicle. The individual did not see the object fall, or find it at the site after the incident. Helicopter landed in McCall and the pilot and an aircraft mechanic proceeded to inspect the aircraft for anything missing. The helitack crew also inspected all cargo doors and passenger doors for loose items or open doors. They concluded that nothing was missing or had fallen off the aircraft and all doors were closed tight and no loose items. Helicopter continued to conduct flight missions throughout the day without any further problems. Helicopter returned to Warren, ID. for more demobilization of fires and the pilot inspected the helicopter for the second time and found nothing missing. One possible conclusion was that a small rock was somehow stuck to the skid and came loose over the individual.

Corrective Action: RASM Remarks: Will do additional follow-up, 9-07-01. I spoke with the helicopter manager, the manager told me that they departed from a cement pad (i.e. not unapproved strip/dirt strip) and the POV was nowhere near the airstrip, but was however in the flight path. Having an LEO on site, finding no evidence of something coming off the helicopter and the manager/mechanic looking over the helicopter upon landing and finding nothing lost.....I have only one solution: Continued vigilance in securing items on the helicopter and exercise caution on your departure paths (if possible) and for folks on the ground, don't park close to the airport's/helispot's departure paths. No further action, 9-14-01.

SafeCom #: **01-696** Date: **08/31/2001** Time: **1700**

Location: **Boiler Creek Fire** Region: **2**

Mission Type: **Fire, Helitack** Procurement: **Contract**

Aircraft Type: **Aerospatiale 306B**

Narrative: Upon opening Babmi bucket to support the Boiler Creek Fire, it was discovered that all but two of the cords attached to bladder had been chewed through by a rodent, rendering bucket inoperable. Helicopter and helitack returned to airport where spare bucket was picked up and bucket work commenced on fire.

Corrective Action: Helicopter and crew had just returned from the Mollie fire, where the bucket was left at helibase on the ground for 6-7 days. Apparently a mouse found cords in bucket make nice nest material, as some of the cords had several inches chewed off. Two things to remember: -Inspect bucket on regular basis whether it's being used or not -If bucket is not to be used for an extended period, it would be a good idea to either keep it in a bag or put it somewhere out of the reach of rodents. In this instance it was not critical to have bucket support on the fire immediately, but other situations could have more serious consequences with inoperable bucket.

SafeCom #: **01-581** Date: **08/25/2001** Time: **0805**

Location: **15 NW Big Hill Helibase**

Region: **5**

Mission Type: **Fire, Water Drop-Bucket (Helicopter)**

Procurement: **Contract**

Aircraft Type: **Bell 214B1**

Narrative: On 8-25-01 approximately 0755, H - 516 was dispatched to the Star fire on the Eldorado N.F. Upon arrival and size-up of the fire, a suitable LZ was located mid-slope in the Middle fork of the American River. Upon landing, the crew unloaded the gear, tools and bucket. The helicopter bucket was attached to the ship in the normal sequence, the hook checks were made and the release mechanism on the bucket was also checked. The aircraft departed the LZ and ascended in a westerly direction to locate a dip site. The bucket deployed normally upon lift off. About one minute later the pilot called me on the radio and stated that they had lost the bucket from the hook. The helicopter was still in sight over the canyon and I observed the bucket wrapped over the tail-boom. I immediately told the pilots of the situation and to land as soon as possible. They located a suitable landing area and maintained communications with me until they safely landed and shut down. A few minutes later they called and informed me that the bucket was still attached to the hook and had flipped over the tail-boom. Notification was made to start an investigation.

Corrective Action: Investigation team inspected the helicopter and released it back to contract fire base. Minor repairs were compleated. Pilot was given a post incident check ride with bucket attached with no deficiencies noted. During all maneuvers, bucket reacted normally. Pilot and helicopter were recommended to the contracting officer to be returned to contract availability. All other related items to this crew and aircraft were found to be normal and in compliance with the contract and Forest Service policy. RASO, R-5

SafeCom #: **01-529**

Date: **08/19/2001**

Time: **1540**

Location: **FS MAINT FACILITY MSO R-1**

Region: **1**

Mission Type: **Inspection (Aircraft)**

Procurement: **Fleet**

Aircraft Type: **Beechcraft 58P**

Narrative: DURING A PHASE NO. 2 INSPECTION, REGION ONE MAINTENANCE SPECIALIST, THROUGH VISUAL INSPECTION OF WING INTERNAL STRUCTURE NOTED AN UNUSUAL CONDITION....THE LEFT WING RIB AT W.S. 191.00 WAS FOUND BOWED OUTBOARD AND BENT IN AREA OF FORWARD WING SPAR ATTACHMENT. THE FWD FALSE SPAR OUTBOARD OF W.S. 191.00 WAS ALSO FOUND BOWED-AFT. A CALL WAS MADE TO RAYTHEON ENGINEERING AND THEIR INITIAL RECOMENDATION IS TO REPLACE ALL DAMAGED STRUCTURAL COMPONENTS AND ATTEMPT TO DETERMINE CAUSE OF COMPONENT FAILURE. NATIONAL MAINT MANAGER WAS NOTIFIED AT 0900 08/20/01. R-1 WILL PERFORM A VISUAL INSPECTION OF ALL OTHER FLEET BARONS PRESENTLY IN R-1 AND REPORT FINDINGS TO NATIONAL MAINTENANCE MANAGER.

Corrective Action: R1 Maintenance personnel removed/replaced bent rib with new, factory rib and performed hidden damage inspection. No other defects were found. Inspections of other Baron 58P's have revealed no similar damage to date.

SafeCom #: **01-483** Date: **08/12/2001** Time: **0913**

Location: **MWH** Region: **6**

Mission Type: **Fire, Retardant Drop (Airtanker)** Procurement: **Contract**

Aircraft Type: **Lockheed P2V**

Narrative: Upon returning to MWH tanker base T-140 reported a chip light on engine #2. Company mechanic removed and cleaned the chip detector and screens. Sludge was removed from the detector and the screen was clean. Engine runup performed and no other problems were found. The aircraft was placed back in availability status by XXXX XXXXXX, R-6 Maint. Inspector. XXX

Corrective Action: RASM: Procedures followed no further action required.

SafeCom #: **01-475** Date: **08/10/2001** Time: **1900**

Location: **Redmond** Region: **6**

Mission Type: **Test Flight (Maintenance)** Procurement: **Fleet**

Aircraft Type: **Beechcraft Baron**

Narrative: While starting takeoff roll on test flight. we started to smell burning insulation. Abandoned takeoff , cockpit filled full of smoke. Secured all electrical and motors. Tried to let airplane coast off side of runway to clear. Then exited airplane. Runway 28 closed for about one hour till tug could remove us.

Corrective Action: RASM: This was treated as a serious incident and we had our National Maintenance Officer come over from Boise to evaluate what had taken place. It was determined that an stc installation of the pulse lights was not done correctly in that they did not have a circuit protection installed. When two wires touched each other it started the arcing. All Barons are being checked for proper STC installation. Aircraft is repaired and back in service.

SafeCom #: **01-465** Date: **08/9/2001** Time:

Location: **Gansner, California** Region: **5**

Mission Type: **Fire, Detection** Procurement: **Contract**

Aircraft Type: **Cessna 206**

Narrative: While flying recon on the Plumas NF I was about to call dispatch with a direction change when I noticed that radio #3 had gone off. I then tried to talk to the pilot and was unable to. I got his attention and then we noticed that radio #2 had gone off. We then noticed the victor radio was off. We then started checking and found that the amp guage was showing a discharge. I called dispatch on my hand held radio and informed them that we lost the aircraft alternator and were in route to Quincy (Gansner) airport. The pilot turned off all other unnecessary electrical equipment to save as much battery life as possible. We were able to make a safe landing at Quincy airport even though we did not have any flaps.

Corrective Action: Alternator replaced. Returned to contract availability. RASO, R-5

SafeCom #: **01-550**

Date: **08/17/2001**

Time: **1205**

Location: **Alturas Heavy Helibase**

Region: **5**

Mission Type: **Fire, Water Drop-Bucket (Helicopter)**

Procurement: **CWN**

Aircraft Type: **Sikorsky 54A**

Narrative: The Sky-Crane experienced a # 1 engine failure three miles out on approach to the Alturas Helibase. Pilots made a safe and routine landing. The engine failure was quiet and sudden. Gauges and diagnostics rule out fuel starvation or a compressor stall. The possible cause for the engine failure could be a flame-out.

Corrective Action: The crew of mechanics changed the # 1 engine at the helibase. Part-power turbing check, UIBE check and power insurance check all were within performance parameters for the new engine. Mechanics put Aircraft back into service. Bosie Aircraft maintenance specialist put the aircraft back on Contract "available status". No further action required. RASO, R-5

SafeCom #: **01-522**

Date: **08/18/2001**

Time: **1200**

Location: **Jelly fire/ Rangely airport**

Region: **2**

Mission Type: **Fire, Leadplane**

Procurement: **Contract**

Aircraft Type: **Beechcraft 58P**

Narrative: While over the Jelly fire, the left engine of the Baron started to run rough. The smell of fuel filled the cockpit followed immediately by seeing fuel running from the left engine cowling. I initiated emergency procedure for in-flight engine shutdown and flew to Rangely airport, single engine. I made the appropriate emergency radio calls to the IC on the fire, Craig dispatch and the local UNICOM at Rangely Airport. The FBO at Rangely contacted the local RFD for ground support. I made an uneventful landing at Rangely. Local mechanic

found source of fuel leak to be from a loose main fuel line fitting at firewall. PILOTS STATEMENT Sequence of events for Saturday August 18, 2001. 0900: Arrived at Jeffco Airport to be on leadplane standby. Performed pre-flight on Baron Approximately 10:30 received dispatch for a leadplane mission to the Jelly fire. Departed Jeffco at 10:40, contacted Fort Collins Dispatch at 10:45 Flight Followed with Fort Collins and then Craig dispatch while in route to the Jelly fire. Approximately 11:40 contacted "Harris" on air to ground frequency for the Jelly fire and informed Craig dispatch on flight following frequency that I was in contact with Harris on the fire. No other aircraft on the fire at this time, dispatch informed me that tanker 139 was about 30 minutes out. Approximately 11:45 configured aircraft for lead profile, lights on, boost pumps on, mixtures rich, props 2400 rpm. I did one practice run to confirm target with Harris. As I added power the left engine had a small fluctuation of power then settled down. At this time I used the GPS to identify the nearest airport thinking my left engine may have problems. All instrument readings were normal. Immediately after identify the nearest airport on the GPS there was a strong smell of fuel in the cockpit, I went on oxygen, closed the pressure valve from the left engine and dump the cabin pressure. At this point I hand the airplane heading for Rangely, which was the closest airport at approximately 13 miles. Visually checking the left engine I observed fuel running out of the top of the engine cowling. I shut down and feathered the left engine, turning both fuel and boost pump off. I contacted Harris on the ground and informed him that I had a massive fuel leak and was declaring an emergency and heading for Rangely. I also contacted Craig dispatch and said the same thing to them. I then contacted Rangely unicom and declaring an emergency and stated that I was doing a straight in landing on runway 24. The landing was uneventful, and I was able to taxi clear of the active runway and shut down on the taxiway. I exited the aircraft and call Craig dispatch to informed them I was OK and would try to find some maintenance help. Local volunteer fire department arrived on scene and supervised the towing of aircraft to the ramp. With the help of the airport manager I was able to contact John Perry, a local A& P mechanic who teaches at the aviation school located in Rangely. He Perry inspected the engine and found that the left main fuel line was loose at the firewall fitting. He tightened the left engine main fuel line at the firewall and torque sealed the connection. We pressurized the left engine fuel system and did an engine run up to check for leaks, No leaks were found. While John was working on the engine, I notice the fuel sight gage on the left wing was lower that that on the right wing. The fuel gages in the cockpit indicated about ¼ less fuel in the left wing that the right. I top the tanks off with fuel at Rangely taking note of exactly how much fuel each wing took. The left wing took 19 gallons more than the right. After John Perry signed off the work he had done I contacted Craig dispatch to inform them I was flying back to Jeffco. I departed Rangely at approximately 1540 and flew to Jeffco. August 19, 2001 I contacted the maintenance shop, which had last work on the aircraft. One of their mechanics met me Sunday morning at the Jeffco Forest Service hanger. He inspected the work done at Rangely and found no leaks. He speculated that the line was probably loosened when it was in their shop the previous week. I feel very lucky that the fuel did not ignite. The evidence inside the engine cowling indicated that fuel was pouring directly on the turbo and the exhaust. /s/ Tom Landon Tom Landon

Corrective Action: Mechanic tighened left engine main fuel line at firewall and torque sealed. Pressurized fuel system and found no leaks. Test ran engine and again found no additional leaks. Mechanic made appropriate log book sign off of discrepancy, test flight was conducted, aircraft was returned to service the next day. RASM 8-20-01: The pilot, Tom Landon, did an outstanding job of recognizing a serious in-flight problem. His prompt actions contributed to the successful outcome of a potentially more serious in-flight emergency. As the Regional Aviation Safety Manager in Region 2, I recommend Tom be awarded an " Air

Ward". Upon landing at the Rangely Airport, the FBO contacted a local aircraft mechanic and ask him for assistance. The Northwest Colorado Community College, which specializes in Aviation Maintenance and Flight Instruction, is located in Rangely. The mechanic, John Perry, is an instructor at the Community College. After he inspected the engine, he found the main fuel line inboard of the engine firewall was loose and was the source of the fuel leak. All other fuel lines were checked and found to be secure. All appropriate write-ups and sign-offs were completed. The appropriate run-ups and test flight were accomplished satisfactorily. The aircraft was then flown back to Jeffco Airport where the maintenance facility that did the original maintenance work on N123Z is located. The chief of maintenance at Wind Song Aviation recheck the work that had been performed and agreeded the proper maintenance work had been completed in Rangely. Note: The previous maintenance work accomplished on N123Z at Wind Song Aviation was the replacement of the pressurization dump cable. While replacing the cable, the air conditioning (AC)system was damaged. While repairing the AC, the fuel lines were loosened to allow for the AC work to be completed. All fuel lines were replaced and secured, however, the main fuel line on the inboard side of the firewall was not checked. This was the loose main fuel line that caused the problem. Wind Song Aviation has been a contract aircraft maintenance facility for the USFS for several years and has an excellent record. Wind Song Aviation recheck the work performed on N123Z and confirmed the aircraft to be in and airworthy condition. No futher action to be taken.

SafeCom #: **01-566**

Date: **08/22/2001**

Time: **1300**

Location: **Boise Tanker Base** Region: **4**

Mission Type: **Fire, Retardant Drop (Airtanker)**

Procurement: **Contract**

Aircraft Type: **Lockheed P2V**

Narrative: At about 1245PM TXXX was returning to the Boise T.B. from Vendor's home base where they had been for there day off and getting there 100 check up. Pilot and Copilot both said that when they taken off at it felt like there was a learch in the airplane as the front landing gear came back into the plane. When they arrived at Boise and began their landing process the front landing gear would not come down all the way and lock into place so the control tower waived them off and Bob headed the plane out for another try. At which time the copilot went down to take a look to see what they could do and Copilot found a 2x4 in the plane and he was able to finish pushing the landing gear into the lock position and TXXX went ahead and landed with no problems and at which time I had them park along the blast fence until their mechanics could get here to work on TXXX.

Corrective Action: The mechanics arrived at Boise in the afternoon and they jacked up the nose gear and found that all the bolts had sheared on the retract link. They replaced all the bolts done a gear swing and everthing worked ok and they also went out and did an actual flight. And Ned Horn was the inspector who returned TXXX backed to contract availability. RASM Remarks: Excellent job by the crew to get the aircraft on the ground safely!

September SafeComs

SafeCom #: **01-770**

Date: **09/29/2001**

Time: **1720**

Location: **West Hell Canyon Fire**

Region: **2**

Mission Type: **Fire, Water Drop-Bucket (Helicopter)**

Procurement: **CWN**

Aircraft Type: **Eurocopter SA330J**

Narrative: At approx. 1720 30J made a water bucket drop and while exiting a canyon, saw the lead plane, Beech Baron, was entering the canyon without airattack direction. The leadplane was heading in my direction at the same attitude and approached within 1/4 mile. 30J turned away as did the Baron in apposite directions. Pilot Callaway stated this type activity happened twice during this cycle. Air Attack noticed the action after the fact and directed both aircraft apart. Air Attack then cleared all aircraft from the fire area to gain control of the airspace.

Corrective Action: Post incident briefing was held with both Lead and Puma pilot on spacing and heads up and always keeping each other in sight. 10-10-01, RASM, R-2. Upon notification of this incident, contact was made with the Air Attack for clarification of the actions taken and his prospective of the seriousness of the actions of both the helicopter and the leadplane. The air attack stated that the leadplane did not follow the instructions given him on the first close encounter. The leadplane pilot did not acknowledge the instructions given by air attack and when asked, said he misunderstood the directions and thought he was cleared back through the drop zone following a retardant drop. Air attack also stated that after he established radio contact with the leadplane, he advised the leadplane to maintain higher altitude as the helicopter was to continue water bucket work in the area of the retardant drops. The leadplane acknowledged these directions. Shortly after this, the leaplane was observed in the area again at low level. The same scenario occurred as the first time with the same comment from the leadplane, "I had the helicopter on TCAS". Upon the airtankers return to the fire, the leadplane lead the airtanker for the retardant drop. This was the last drop of the day, and air attack released the leadplane and the airtanker back to the airtanker base. The air attack contacted the leadplane pilot by phone in the evening to inquire if there was a problem with the communications or if there were other problems. The leadplane pilot said he felt the airspace was safe and that there was no problem. RASM, although the leadplane pilot felt the situation was safe, his actions caused concern with the helicopter pilot and the air attack. It is the responsibility of the leadplane pilot to comply with the instructions of the air attack when air attack is managing the aerial operations and airspace of the incident. This experienced leadplane pilot agreed. No further action required to correct this incident.

SafeCom #: **01-752**

Date: **09/22/2001**

Time: **1325**

Location: **Craggie Incident P65824/0611**

Region: **6**

Mission Type: **Fire, Air-Attack**

Procurement: **CWN**

Aircraft Type: **Cessna 340**

Narrative: While on an air attack mission in the early afternoon (1325), we were in a tight right hand bank looking straight down at the fire, when, we saw a small Cessna fly under us at a distance of less than 500'. The pilot immediately leveled our aircraft so we could get a better look. We then followed the intruder to try and get the "N" number, which we did not get. I then called the helibase to have them hold all aircraft coming to the fire until the intruder left and asked them to call Grants Pass dispatch to see if they knew of any other aircraft that would be in the area. We followed the aircraft for 35-40 minutes. During the time we followed the intruder he passed over the fire three times, made a flight to and circled our dip site, which was in the TFR, then headed toward Agness, which is where the ICP is located, made a circle around ICP, went back to the fire area then exited the TFR heading N-NE along the river at 1410. At one time we passed in front of the intruder about a half mile or more and he fell in behind us for a short distance. I called the helibase, told them it was safe to resume air operations over the fire. By this time it was time for us to return to Grants Pass for fuel and was relieved by the other ATGS. When we arrived at Grants Pass at 1430 I asked around the FBO office to ascertain if anyone knew of the Cessna, no one did. Upon arriving back at the IV helibase, (Cave Junction airport), The helibase manager informed me that the aircraft was a Civil Air Patrol plane on a search mission for three folks in the wilderness to the North of the fire. When looking at a map of the fire and the search area, the area was well north, in the wilderness and out of the TFR. The helibase manager also said the Sheriffs department called and identified the aircraft as CAP flight #XXXX and gave a few details of the search. Facts: There was a TFR in place over the fire, 5-mile radius to 7500' MSL. Our altitude at the time we saw the aircraft fly under us was 5000". The intruder aircraft was a Cessna 182, red, white and blue in color with the tail being all red. The local Forest Service LEO is investigating.

Corrective Action: UAO Comments: See & Avoid worked again. TFR intrusions are always interesting to deal with. The Dispatch Center notified the FAA (Seattle ARTCC) approximately 20 minutes after the intrusion was reported (@ 1345). Seattle ARTCC advised that intrusions need to be reported to them immediately so they can attempt to track the aircraft from the intrusion location to wherever they land for follow-up with the pilot. The ATGS in the Air Attack aircraft (XXX) followed proper procedure in notifying the helibase and the Dispatch Center to keep all fire-assigned aircraft out of the area until the intruder had left. The pilot of XXX followed-up with a phone call to McMinnville FSS to discuss the need to file a Near Mid Air Collision report. The FSS advised that without a full tail number on the intruding aircraft, it was not necessary to file a former report, but they did log the information in their files. The following day the same Civil Air Patrol aircraft was back in the area, but outside the TFR, as the Search & Rescue operation was still ongoing. The pilot stayed well clear of the TFR and contacted Air Attack via radio while in the area. So, the word did get out about the TFR, but it is unknown if this was same pilot. As a side light, the three missing hikers were found and safely returned to their families (see SAFECOM #01-757 for details of Craggie Fire aircraft involvement in the retrieval of some of the hikers). Acting RASM: Follow up with airspace coordinator

SafeCom #: **01-716**

Date: **09/13/2001**

Time: **1045**

Location: **Rex Fire Complex**

Region: **6**

Mission Type: **Medivac**

Procurement: **Contract**

Aircraft Type: **Bell 212**

Narrative: At 1045 XXXX XXXXXXXXX, Chelan EMS Director, drove to Rex Fire Camp requesting a Medivac flight for a life threatening injury on Chelan Butte. We checked as he also did on Med. flight availability from Moses Lake, WA. They were not available. We checked with Chelan Co. to see if their helicopter was available. They were not available. We checked with Med Flight in Spokane and they were 60 min. out, if they could get Center and Flight Service ok to fly. The IC and XXXX XXXXXXXXX, the detailed Forest Aviation Officer, was standing by in the Fire Comm. trailer and we were discussing options and procedures. I notified 25 Mile Helibase of an impending Medivac and instructed them to have the pilot obtain a discrete code and file a flight plan. The pilot received his codes and opened flight plan. At 1103 678 was airborne with code and flight plan freq. to contact Medic. Notified XXX in CWICC of Medivac of Chelan Co. PUD worker to Central WA. Hospital in Wenatchee. XXXX from CWICC called and said XXX did not have clearance to fly. Checked at helibase to confirm XXX had discrete code and open flight plan. He did have the flight plan and code. Confirmed at Helibase we have a code. Let XXXX at CWICC know we were good to go. Flight landed picked up patient and transported to Wenatchee and returned to 25 Mile Helibase. The return trip to 25 Mile was confirmed under the extended discrete code from Center.

Corrective Action: UAO: The situation was an emergency, FAA processes were followed and confusion existed between the FAA and Forest Service Aviation operations. The correct decisions were made and confusion between the FAA and FS continued but we continued to work on the process. Acting RASM: Will continue with follow-up.

SafeCom #: **01-715**

Date: **09/13/2001**

Time: **1730**

Location: **Snow Slide Fire**

Region: **4**

Mission Type: **Fire, Helitack**

Procurement: **Contract**

Aircraft Type: **Bell 407**

Narrative: Upon our release from the fire we contacted Salt Lake Center, as we were required to do with the restrictions in place due to terrorist activity. We had our discrete transponder code in the transponder as we were supposed to. The controller told us to squawk 1200. We were descending into Heber Airport at the time and called Flight Service once on the ground. Flight Service said NOT to change transponder codes-especially to 1200 and to maintain our discreet code given to us earlier in the day. Helicopter NXXX was also at Heber City Airport. Upon talking with their Manager I was informed that at about

1630, 15 miles east of Heber upon contacting Salt Lake Center they were told "radar contact terminated squawk VFR (which would be 1200). The HEMG and Pilot did not comply due to precise FAA instructions on Transponder code procedures. No F-16's were launched, both aircraft then safely flew to Morgan Co. Airport for the night.

Corrective Action: RASM Remarks: I also spoke to RAO about this incident; we believe the right procedures were followed by the pilot. Old habits are hard to break, and even our controllers are human.....He/she was so "use" to saying "squawk 1200, frequency change approved", I suspect this happened several times by many controllers this past week, have patience, a little price to pay for our National Security. Thanks for submitting the safecom!

SafeCom #: **01-768**

Date: **09/12/2001**

Time: **1100**

Location: **Boundary, WA**

Region: **6**

Mission Type: **Fire, External Load (Longline)**

Procurement: **CWN**

Aircraft Type: **N/A**

Narrative: I would like to nominate Ms. XXXXX XXXXXX for an Airward. Nancy works for the Washington State Department of Natural Resources in the Northeast Region. Nancy was assigned to the Boundary fire Okanogan National Forest as Helibase Manager. The helibase was located at Foster Field approximately 15 miles out of Winthrop Washington. The fire was located in the Pasayten Wilderness near the Canadian border and necessitated that all firefighters, equipment and food be flown into the fire. On September 19, 2001 there were 2 heavy, 4 medium and 1 light helicopters working out of Foster Field. Communications between the fire and the helibase had to go through a human repeater. Telephone communications with ICP were just being established. The helicopters were trying to ferry firefighters to the fire and support the fire fighters on the line with equipment (long line) and water drops. Helicopters were having difficulty communicating with each other. The helicopters were having difficulty communicating with the helibase. Nancy recognized that there was a problem with communications. She shut the aviation operations down and gathered all the managers and pilots together and had a frank open discussion concerning communications. She discussed assigned frequencies, assignments, procedures and operational plans. Once she was assured that everyone understood the plans and procedures she allowed operations to start again. The operation ran extremely smoothly after Nancy's meeting. Aviation resources flew nearly 400 flight hours on this incident with no problems. I believe that Nancy's actions prevented potentially serious accident with the aviation resources assigned to this fire. Way to go Nancy!! XXXXX X XXXXXXXX Boundary Fire Incident Commander

Corrective Action: RASM: I concur with recommendations for Airward. Forwarded to WO for action.

SafeCom #: **01-706**

Date: **09/12/2001**

Time: **1449**

Location: **Roseburg Airport to Toketee He**

Region: **6**

Mission Type: **Fire, Other**

Procurement: **CWN**

Aircraft Type: **Aerospatiale 330J**

Narrative: Inspected NXXXX at Roseburg airport. Gave the Pilot the frequency for the Umpqua National Forest, Air to Ground and Victor. I did not have a radio with the frequencies yet as I was not able to clone at that time. So I failed to test the radio. I instructed the Pilot to contact Roseburg upon departure and flight follow with them. I departed 1420 for the 1 hour drive to Toketee airstrip. NXXXX departed shortly afterwards. Upon arrival at Toketee I learned that NXXXX could transmit but not receive on Forest Net and Air to Ground. They did not have a positive response from Roseburg and decided to continue to Toketee anyway. They were able to contact Air Attack on Victor and landed at the helibase.

Corrective Action: Unable to fix the problem and they were released the next day. Talking with mechanic I learned NXXXX had just come off major maintenance and was carded 9/7. Mechanic felt the problems were probably a result of major maintenance. UAO Comments: I am the UAO on the Umpqua NF and this was given to me hard copy by the IMT2 Air Ops Branch Director XXXXXX XXXXXX on 9-17-01. So I am entering electronically. "Sometimes in the rush of "mission focus" we do not insure proper risk analysis and testing procedures are followed. Fortunately in this case, redundancy in communication requirements and luck prevented serious consequences.

SafeCom #: **01-710**

Date: **09/2/2001**

Time: **1500**

Location: **Sutherland School Fire**

Region: **2**

Mission Type: **Fire, Retardant Drop (SEAT)
Cooperator**

Procurement:

Aircraft Type: **Unknown**

Narrative: At approximately 1500, 3 Forest Service vehicles and 3 fire personnel were performing a burnout in a large meadow, along County Road 333. A SEAT came into the fire area to do a retardant drop on the fire. He flew across the meadow and was able to have visual contact with the people on the ground. The SEAT used County Road 333 as an anchor point and without having any air to ground communications he dropped directly on the vehicles and personnel. The Forest Service personnel were monitoring the air to ground frequency, as well as the other local frequencies. Contact was made with the Forest Service contract helicopter that was also working the fire. He relayed to the SEAT that he had dropped on the Forest Service personnel and to drop on another area of the fire.

Corrective Action: Aviation Safety and Management are working to correct the ongoing problem with this SEAT. Corrective actions taken will follow. RASM, R-2: This SEAT does not meet the Interagency Fire standards to include radio communications. This requirement was not mandatory for the State of SD for this year. An agreement has been reached that will require all SEAT aircraft contracted by the State of SD to meet Interagency Fire Standards in the future. We feel this will correct the problem in the future. No further action required.

SafeCom #: **01-678**

Date: **09/5/2001**

Time: **1730**

Location: **Ned fire on the Salmon**

Region: **1**

Mission Type: **Fire, Retardant Drop (Airtanker)**

Procurement: **Contract**

Aircraft Type: **Lockheed P2V7**

Narrative: Dispatched to the Ned fire at 1651 on Sept. 5, 2001 from Missoula, Montana. Fire was in the Salmon district at an elevation of approximately 9000 feet. Burning on a ridge on the high point of a mountain. IC requested that I try to box the fire on the southeast and northeast side which was the low point of the fire. Two approaches were made from over the ridge, but were off line both times. Decided to make the drop out of a right turn parallel with the ridge and across the bottom of the fire. This approach enabled me to keep the target area in sight though out the drop. This approach worked out very well, but was a steep down hill run. On the recovery, the aircraft continued to settle, possibly because of a combination of the winds, altitude and the high rate of sink. In any event, we were completely clear of the drop and coming up on a secondary ridge that was below the drop. There were dead, burned out trees on this ridge and the airplane struck the tops of two or more of them as we made our recovery. The aircraft continued to fly normally with no control problems. We made the best visual inspection we could and could determine no damage. It was apparent that we did strike something so it was decided to return to Missoula where the aircraft could be inspected and repaired as necessary. The rest of the load was dropped in the fire area and the return to Missoula was without incident. Upon inspection, it was found that the front tank fairing sustained some damage from the tree strikes.

Corrective Action: The preliminary determination has been made that this is an Incident with Potential. An investigation Team has been assigned. The team is assembling in Missoula tonight, 09/06/01. Their findings will be included at a later date.

SafeCom #: **01-731**

Date: **09/18/2001**

Time: **1030**

Location: **Devil Fire**

Region: **1**

Mission Type: **Fire, External Load (Longline)**

Procurement:

Aircraft Type: **Bell 212**

Narrative: On 9/18/01 at approximately 1030 I received two longline sling loads to the devil fire. The first load consisted of four cubies and fedco water bags. I informed the pilot that the drop point was a tight spot and if he needed more room, we could make it for him. The first sling was successful. My second load was a 72-gal blivet. The drop point was constructed at the top of my fire. The ship approached from the bottom of the fire at a very low altitude. My crew was spread out through the fire. The longline with the blivet attached on the end was dragged through the tops of some large trees. At that point my firecrew scattered for safety. This continued to the top of the fire. When the ship approached the drop point, the blivet was wrapped around the top of a tree, at which the pilot raised the ship and limbed the tree throwing branches in all directions. The sling continued to rock back and forth until placed on ground. I apologized to the pilot about the tight spot, at which he stated he had little longline experience.

Corrective Action: On 9-19-01, pilot and manager were told to not do longline loads into tight spots, only go into spots with good open approach. At the top of the fire is an open brush field and to use it. Forest aviation officer talked with the pilot and the manager about where to longline and not to longline.

SafeCom #: **01-750**

Date: **09/19/2001**

Time: **1630**

Location: **Priest Lake**

Region: **1**

Mission Type: **Other, Helispot Main.**

Procurement: **CWN**

Aircraft Type: **Aerospatiale 315B**

Narrative: When the helicopter landed at Nordman (Priest Lake) after attempted helispot work at Plowboy, I noticed the pilot and mechanic looking at the rotor blades. I noticed that the rotor blade caps were damaged on the under side. This was caused by an apparent rotor strike on a small tree. The mechanic checked specifications and sounded the blades and stated they were OK. The end caps were replaced that evening and the helicopter was returned to availability after contact with R-1 aircraft inspector.

Corrective Action: FAO Comments: Pilot and helicopter crew were reminded that pushing safe limits never pays and just walk folks to marginal sites that need improvement.

SafeCom #: **01-751**

Date: **09/21/2001**

Time: **1610**

Location: **Illinois Valley Airport**

Region: **6**

Mission Type: **Fire, Reconnaissance**

Procurement: **CWN**

Aircraft Type: **McDonnell Douglas 500D**

Narrative: NXXXXX performed a recon operation with the doors removed on the Craggie Fire @ 1431 on 9/21/01. NXXXXX landed at Agness I.C.P. and off-loaded two passengers, then returned to Illinois Valley Helibase. On short final to pad 4, a square object was observed falling from the helicopter rear passenger area. After landing, an inspection of XXXXX revealed that the right rear back support seat cushion had fallen out of the aircraft. Further inspection showed that the seat belt had not been properly secured to hold the seat cushion in place by helitack personnel at Agness I.C.P.

Corrective Action: ASGS: - Do not fly with doors off unless mission specific. - Brief helitack personnel on proper seat belt placement for M.D. 550's flying with the doors off. - Ensure that helitack personnel that were not present at initial M.D. 500 briefing (remote helibase, helispot, etc) are made aware of important procedures critical to that ship before flying. - Ensure that pilot has inspected helitack seat belt procedure before lifting off. AOB: The main helibase and helispot were widely separated. Upon arrival, the helispot crew was briefed, by ATGS, on ELT & Fire Extinguisher locations but not on the correct seat belt procedures. This incident highlights the needs for coordinated briefings with remote locations. UAO: The ASGS & AOB comments cover what actions need to occur as preventative measures for this type of incident. Primarily doors-off flights, proper seat belt procedure, and good briefings with all incident assigned aviation personnel on procedures to follow with each aircraft. Acting RASM: No further action required.

SafeCom #: **01-691**

Date: **09/1/2001**

Time: **1400**

Location: **Substation Fire**

Region: **4**

Mission Type: **Fire, Water Drop-Bucket (Helicopter)**

Procurement: **CWN**

Aircraft Type: **Bell 212**

Narrative: Helicopter completed 2 bucket drops but could not release the 3rd bucket and returned to helibase. A second bucket was tested, but the same problem occurred. All connections from the belly hook through the longline to the bucket were tested and good. The HEMG could not contact the OAS maintenance inspector over the holiday weekend, so the USFS one was notified. The mechanic pulled the floorboard out and tightened a loose crimp and cleaned out the solenoid. The MI was again contacted and spoke with the mechanic and gave the go ahead to resume bucket work. Later in the evening the pilot completed 8 bucket drops but could not release the 9th. The mechanic removed the cargo hook and cleaned the armature to ensure good contact. The MI was contacted on 9/2 and spoke with the mechanic and again gave the go ahead to resume bucket work. The pilot completed 15 bucket drops, but the 16th would not release. The MI was notified on 9/3. The mechanic removed the cargo hook and performed a thorough check and cleaning and reinstalled. The MI was notified, but said to refrain from bucket work and all longline work

until the entire hook is replaced. The helicopter was released before it could be determined if the last fix worked.

Corrective Action: RASM Remarks: The R-4 Airworthiness Inspector had the following comments: "The vendor Removed and Replaced the bucket. They (the vendor) did say that after dis-assembling the hook they had found a broken spring." No further comments, 9-13-01.

SafeCom #: **01-756** Date: **09/21/2001** Time: **1600**
Location: **IV Helibase, Cave Junction** Region: **6**
Mission Type: **Fire, External Load (Longline)** Procurement: **Contract**
Aircraft Type: **Bell 205**

Narrative: During a backhaul mission (longline) from the Craggie Fire XXXX had an engine chiplight activate just prior to setting cargo on the ground. XXXX proceeded with cargo and then returned to Pad 1 just 200 yds south of the cargo area. Pilot shut down aircraft after mechanic removed & installed chip plug. This was the fourth light in a three week span (30 +/- flight hrs). Mechanic found small "slivers" of metal on plug - placed in NA status @ that time.

Corrective Action: Company mechanic & Regional Aircraft Inspector talked & the decision was made to fly aircraft to company headquarters for engine replacement. (L-17B) Proper run-ups & vibration checks were performed with new engine & XXXX returned to IV helibase. Log entries were examined & ship was placed back into contract availability. UAO: With 4 chip lights in about 30 hours of flight time, replacing the engine sounds like the right way to go. Good decision. Acting RASM: No further action.

SafeCom #: **01-754** Date: **09/24/2001** Time: **1000**
Location: **MT-FNF-061 Moose Fire** Region: **1**
Mission Type: **Fire, Air-Attack** Procurement: **Contract**
Aircraft Type: **Beechcraft 55**

Narrative: While performing Air Attack duties over the Moose Fire, both FM radio displays went blank. Displays on GPS, moving map, and AM radios were fading in and out. AM Com 1 radio was working. Pilot turned off all radios and GPS except Com 1. Exited Moose Fire. Could not talk to Moose Helibase or Flathead Dispatch. Contacted FCA Tower and asked them to telephone tanker base to launch relief Air Attack. Landed at FCA with normal

communication with tower. On ground, contacted both Flathead Dispatch and Moose Helibase by telephone.

Corrective Action: Director of Maintenance checked & cleaned connector plugs to #1 & #2 voltage regulators. 1/2 hour flight check found both #1 & #2 regulators functioning normally. Load check on #1 & #2 alternators checked normal. Suspected dirty connector on #1 regulator. Aircraft was approved for return to (availability).

SafeCom #: **01-675** Date: **09/3/2001** Time: **1740**

Location: **Porterville Air Attack Base** Region: **5**

Mission Type: **Fire, Retardant Drop (Airtanker)** Procurement: **Contract**

Aircraft Type: **Lockheed SP2H**

Narrative: Pilots Statement: While responding to the Wishon Fire, #2 engine started to back fire and lost power. Tanker 01 notified AA-13 of the problem, after feathering the #2 engine. Having plenty of altitude T-01 selected a spot and aborted their load within the forest boundary. T-01 returned safely to Porterville on one engine, and Aero Union mechanics changed #2 engine. /s/ Greg Hock T-01 went out of service mechanical at 1759 on 9/3/01, Mechanics performed an engine change overnight. T-01 did a test flight at 1100 on 9/4/01 and the Aero Union mechanics blessed the flight. Phoned and faxed the information to Bill McVicker, Regional Maintenance Inspector who reviewed the information, then he returned it to contract availability. T-01 was back on and available at 1150 on 9/4/01. /s/ Craig French, Assistant Base Manager

Corrective Action: No further action required. RASO, R-5

SafeCom #: **01-743** Date: **09/15/2001** Time: **0800**

Location: **Baseline Helibase** Region: **5**

Mission Type: **Inspection (Aircraft)** Procurement: **Contract**

Aircraft Type: **Bell 212HP**

Narrative: After changing oil in the forty two degree tail rotor gear box and cleaning the sight glass. The mechanic put the sight glass back in backwards. Was eventually able to get the glass out, undamaged, and put in correctly.

Corrective Action: I hope he doesn't have any plans about going into the field of optometry! No further action required. RASO, R-5

SafeCom #: **01-732**

Date: **09/15/2001**

Time: **1830**

Location: **Roseburg, OR (RBG)**

Region: **6**

Mission Type: **Ferry/Repositioning Flight**

Procurement: **Contract**

Aircraft Type: **North American 500S**

Narrative: A12 left SBD and flew direct to RBG (4 hr flight). Upon landing hydraulic oil was noted on #2 engine nacelle and landing gear with a slow drip coming from the landing gear cell. Source of leak was undetectable due to area of nacelle. On morning of 9/16 pilot and airport based mechanics attempted to isolate source of the leak for repairs. Possible solution was beyond the capabilities of the local mechanics and decision was made to fly to a shop in Hillsboro where Aero Commander facilities were available. Aircraft was flown to Hillsboro on 9/17, #2 nacelle removed and source of leak identified (small hairline crack with a small amount of corrosion around area on hydraulic rigid supply line). Parts were located and line repaired. Total contract unavailability was 18 hours. Region 5 aviation maintenance inspector was notified on morning of 9/17 after calls to Region 6 inspector were unanswered. He was kept updated on the situation and repair entries and log entries were faxed direct to him. Aircraft was placed back in contract availability at 1000, 9/18/01.

Corrective Action: BDF FAO/COR, though it is not mentioned in report, and after checking, the maintenance inspector was contacted and authorized the flight to have the repairs made in Hillsboro. This is an important step in the process. No further action required. RASO, R-5

SafeCom #: **01-723**

Date: **09/18/2001**

Time: **1015**

Location: **Grants Pass Airport @ Merlin**

Region: **6**

Mission Type: **Fire, Air-Attack**

Procurement: **CWN**

Aircraft Type: **Cessna 340**

Narrative: Aircraft just came out of a 100 hour inspection, 9/16-17/01. This was the first flight of the day to reposition from Roseburg to Merlin for air attack. I left Roseburg via car at 1000, aircraft to leave at 1015. I arrived at Merlin at 1100. When I arrived the pilot informed me that that when he shut down at the fuel pump the left prop went into the "feather position", (the flight was completed without incident). The pilot went to a local maintenance shop and enlisted the services of the mechanic on duty. After inspection of the prop by removing the nose cone housing, it was determined that the chader valve had lost air pressure which resulted in the low pitch stop pins not engaging. The problem identified was that the "O" ring was damaged. At that time parts were ordered and would not be in to Merlin until this morning at 1030. At that time I placed the aircraft out of service and called XXXX

XXXXX at the Redmond Air Center and let him know what is going on with the aircraft. He said when the aircraft is repaired and up and running to call him again.

Corrective Action: UAO: Proper procedures were followed in placing the aircraft out of service (or unavailable) until the necessary maintenance was performed. The Regional Aircraft Maintenance Program Manager was consulted with over the phone, and he returned the aircraft to service after discussing the maintenance that was performed with the pilot, and after receiving the paper work he requested via FAX. No further action or follow-up is needed. Acting RASM: Entered for tracking.

SafeCom #: **01-684** Date: **09/3/2001** Time: **1800**

Location: **Peppermint Helibase, SQF** Region: **5**

Mission Type: **Fire, Helitack** Procurement: **Contract**

Aircraft Type: **Bell 212HP**

Narrative: Aircraft and crew initial attacked a fire on the south end of the Forest. Crew was released and returned to base. At 1810 H-522 was dispatched to a local fire in the area. Aircraft and crew lifted off Peppermint and within a minute the pilot asked if anyone could feel a vibration. At this time we chose to return to base. On short final pilot said vibration was gone. After landing, pilot did a visual inspection of aircraft and found no signs of damage. Called R-5 maintenance inspector and was told to wait for mechanic to inspect aircraft. Mechanic found a green stain on main rotor blades. It was suggested that a leaf or other type of plant material was introduced into the rotor system when we took off for the fire and stayed on the leading edge of the blade causing a burble and thus, the vibration. When the ship was returning the debris fell off and the vibration stopped. Mechanic spoke with maintenance inspector the next morning and aircraft was okayed for flight. Over the next few days H-522 flew multiple missions and no vibration was felt.

Corrective Action: No further action required. RASO, R-5

SafeCom #: **01-739** Date: **09/21/2001** Time: **0900**

Location: **Foster Field, Boundary, OKF** Region: **6**

Mission Type: Procurement: **Contract**

Aircraft Type: **Bell 206L3**

Narrative: During 100 hour inspection, mechanic found metal in transmission oil filter. He contacted Bell Helicopters, it was determined by phone that the metal was caused by the

mast bearing. Head will be pulled and bearing will be replaced. Transmission will be opened, cleaned and inspected.

Corrective Action: UAO: Aircraft was placed in contract availability on 9/24 by XXXX XXXXX, Aviation Maintenance Inspector Program Manager. Acting RASM: Great catch by mechanic. Proper procedures followed. Entered for trend analysis.